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# **A Thematic Analysis of Anticompetitive Behaviour in the Credit Rating Process of Structured Finance**

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A thesis submitted to Plymouth University  
in partial fulfilment for the degree of

**DOCTOR OF PHILOSOPHY**

Plymouth Graduate School of Management  
Faculty of Business

**2018**

## **List of Abbreviations**

<b>Acronyms</b>	<b>Meanings</b>
ABS	Asset-Backed Securities
BET	Binomial Expansion Technique
BIS	Bank of International Settlements
CAQDAS	Computer Aided Qualitative Data Analysis Software
CDOs	Collateralised Debt Obligations
CESR	Committee of European Securities Regulators
CMBS	Commercial Mortgage Backed Securities
CRA	Credit Rating Agency
CRAs	Credit Rating Agencies
DBRS	Dominion Bond Rating Services
EC	European Commission
EJR	Egan-Jones Rating
ESMA	European Securities and Markets Authority
EU	European Union
FEI	Organization of Financial Executives International
GQR	Greenberg Quinlan Rosner Research
IOSCO	International Organisation of Securities Commissions
JCIF	Japanese Centre for International Finance
MCS	Monte Carlo Simulation
MCM	McCarthy, Crisanti and Maffei
NERA	National Economic Research Associates
NRSRO	Nationally Recognised Statistical Rating Organisation
OLS	Ordinary Least Squares
RMBS	Residential Mortgage Backed Securities

SMP	Significant Market Power
SOX	Sarbanes–Oxley Act of 2002
S&P	Standard and Poor’s
TFEU	Treaty on the Functioning of the EU
UK	United Kingdom
US	United States

## **Abstract**

The credit rating industry is characterised by the high concentration of a small number of firms and, allegedly, this concentration stems from certain anticompetitive behaviours made manifest by the dominant firms in the industry. Therefore, as has yet to be done in empirical research, the purpose of this study is to carry out an exploration of the antitrust behaviours supposedly perpetuated by agents in the credit rating process for debt finance. The aim is to determine what influences, if any, the interactions and relationships in the rating process have on the sustenance of the oligopoly in the rating industry and on impeding new rating agencies trying to enter the market. Through the application of thematic analysis, this study aims to gather evidence on the behavioural motivations of rating analysts and underwriters in the rating process.

Furthermore, the theoretical framework suggests notching and tying to be the anticompetitive behaviours that strengthen the oligopoly. Hence, the study finds that the drivers of anticompetitive notching in the rating process are the taking of haircuts and mapping, the guise of protecting investors' interests, punitive ratings and a quid pro quo rating norm. Similarly, it finds that the enablers of anticompetitive tying are continuous dealing in the rating process, covert negotiation, repeat rating requests, ancillary services and the regulatory overdependence on credit ratings.

In addition, this thesis explores the impediments of new rating agencies trying to enter the credit rating industry and finds that new rating agencies face peculiar market, regulatory and organisational barriers. Firstly, the market barriers comprise arbitrage, economic rents, investor preference and the issuer-pay model. Secondly, the regulatory barriers are discretionary regulation, new regulations and the designation of nationally recognised statistical rating organisation status. Lastly, the organisational barriers include down-trading, inadequate funding, the lack of geographic spread, low added intellectual value and a narrow product and service scope.

Finally, this research recommends for regulatory authorities to agree to a harmonised convention on the recognition of credit rating agencies that may lead to the emergence of new robust agencies. It also proposes the standardisation of mapping practices in the notching process to reduce rating variance among credit rating agencies. Lastly, the research offers evidence of notching for competition and tying through informal services that may substantiate antitrust liability for possible antitrust intervention.

## Table of Contents

<b>List of Abbreviations .....</b>	<b>3</b>
<b>Abstract .....</b>	<b>5</b>
<b>Dedication .....</b>	<b>11</b>
<b>Acknowledgment.....</b>	<b>12</b>
<b>Author's Declaration .....</b>	<b>14</b>
 <b>CHAPTER ONE: INTRODUCTION .....</b>	 <b>15</b>
1.0 Introduction .....	15
1.1 Background and Rationale .....	18
1.2 Research Aim and Objectives.....	20
1.3 Structure of the Study .....	21
1.4 Conclusion.....	23
 <b>CHAPTER TWO: LITERATURE REVIEW .....</b>	 <b>24</b>
2.0 Introduction .....	24
2.1 The regulation of CRA Competition by the State .....	24
2.2 Dynamics in the Regulation of CRAs for Competition.....	26
2.3 Market Structure of the Rating Industry .....	33
2.4 Oligopoly in the Rating Industry .....	44
2.5 Economies of Scale .....	46
2.6 Diseconomies of Scale .....	50
2.7 Rating Quality .....	52
2.8 Network Effect and the Two-Rating Norm .....	59
2.9 Rating Pricing .....	66
2.10 Reputational Capital .....	70
2.11 Mergers and Antitrust Behaviour .....	75
2.12 Notching, Tying and Unsolicited Rating .....	78
2.13 Review of Prior Studies on Notching .....	87
2.14 The Rating Process .....	90
2.15 The Theoretical Framework for this Study .....	94
2.16 Conclusion of Literature Review .....	97
 <b>CHAPTER THREE: METHODOLOGY.....</b>	 <b>100</b>
3.1 Introduction .....	100
3.2 Paradigms in Qualitative Research.....	101
3.2.1 Ontology.....	103
3.2.2 Epistemology.....	105

3.2.3 Methodological Questions .....	107
3.2.4 Constructivist Paradigm in this Study .....	107
3.4 Social-Constructivist Paradigm in this Study .....	109
3.5 Research Approach .....	109
3.6 Research Strategy .....	110
3.7 Designing Qualitative Research.....	111
3.8 Choice of Thematic Analysis in this Study .....	120
3.9 Conclusion.....	121

#### **CHAPTER FOUR: METHOD ..... 123**

4.1 Introduction .....	123
4.2 Primary Questions and Decisions.....	125
4.3 Thematic Analysis Technique .....	132
4.4 Data Collection .....	132
4.4.1 Data for this Study.....	132
4.4.2 Sample Selection .....	134
4.4.3 Research Sample in the Current Study .....	138
4.4.4 Respondent Characteristics .....	140
4.5 Research Sample and Respondents in Previous Studies.....	141
4.6 Location of Study .....	143
4.7 Instrument for Data Collection .....	145
4.8 Pilot Test of Semi-Structured Interviews.....	146
4.9 Access, Disclosure, Ethics and Limitations in Data Collection.....	148
4.10 Computer Aided Qualitative Data Analysis Software (CAQDAS).....	150
4.11 Conclusion.....	151

#### **CHAPTER FIVE: THEMATIC DATA ANALYSIS..... 152**

5.1 Introduction .....	152
5.2 Stage 1: Familiarisation with the Data .....	153
5.2.1 Data Processing, Transcription and Memoing.....	153
5.3 Stage 2: Generation of Initial Codes .....	155
5.3.1 Re-reading of the Transcripts.....	156
5.3.2 Identifying and Naming Attributes .....	157
5.3.3 Matching Data Extracts .....	161
5.3.4 Collating Data Extracts.....	162
5.4 Stage 3: Searching for Themes .....	164
5.5 Stage 4: Reviewing Themes.....	165

5.5.1 Reviewing Coded Data Extracts.....	165
5.5.2 Reviewing the Data Set.....	168
5.6 Stage 5: Defining and Naming Themes .....	168
5.6.1 Findings: The Impediments of New CRAs .....	169
5.6.2 Findings: Notching for Risks.....	185
5.6.3 Findings: Notching for Competition .....	191
5.6.4 Findings: Tying.....	198
5.7 Conclusion.....	204
<b>CHAPTER SIX: DISCUSSION OF FINDINGS .....</b>	<b>214</b>
6.1 Introduction .....	214
6.2 The Impediments of New CRAs in the Rating Industry .....	215
6.2.1 Market Barriers Facing New CRAs .....	215
6.2.2 Regulatory Barriers facing New CRAs .....	220
6.2.3 Organisational Barriers Facing New CRAs .....	223
6.3 The Drivers of Notching for Risks in the Rating Process .....	231
6.3.1 Debt Quality .....	231
6.3.2 Managerial Competence .....	238
6.4 The Drivers of Notching for Competition in the Rating Process .....	241
6.5 The Drivers of Tying in the Rating Process .....	249
6.6 Conclusion.....	256
<b>CHAPTER SEVEN: CONCLUSION &amp; FUTURE RESEARCH .....</b>	<b>257</b>
7.1 Introduction .....	257
7.2 Conclusions of the Thesis.....	257
7.3 Contributions to Knowledge, Practice and Policy.....	259
7.4 Limitations of the Study .....	262
7.5 Suggestions for Future Research .....	263
<b>References .....</b>	<b>265</b>



## List of Tables

TABLE 1 “CRAs REGISTERED IN EUROPE AS AT SEPTEMBER 2015” .....	36
TABLE 2 “MARKET COMPARISON OF THE BIG THREE” .....	38
TABLE 3 “RATING SCALES OF THE BIG THREE CRAs” .....	40
TABLE 4 “TYING ARRANGEMENTS” .....	83
TABLE 5 “RESPONDENT DETAILS” .....	141
TABLE 6 “TIMELINE FOR PILOT STUDY” .....	147
TABLE 7 “CODE NAMES AND ATTRIBUTES” .....	158
TABLE 8 “COLLATED DATA EXTRACTS” .....	162
TABLE 9 “BOND RECOVERY RATES” .....	236

## LIST OF FIGURES

FIGURE 1.1 “THE RATING PROCESS” .....	93
FIGURE 2.2 “THEORETICAL FRAMEWORK” .....	96
FIGURE 1.3 “STAGES OF THEMATIC ANALYSIS IN THIS STUDY” .....	152
FIGURE 1.4 “PROCESS OF CODING IN THIS STUDY” .....	156
FIGURE 1.5 “TREE MAP OF CODES COMPARED BY NUMBER OF DATA EXTRACTS CODED”	161
FIGURE 1.6 “INITIAL THEMATIC MAP: THE IMPEDIMENTS OF NEW CRAs” .....	206
FIGURE 1.7 “INITIAL THEMATIC MAP: NOTCHING FOR RISKS” .....	207
FIGURE 1.8 “INITIAL THEMATIC MAP: NOTCHING FOR COMPETITION” .....	208
FIGURE 1.9 “INITIAL THEMATIC MAP: TYING” .....	209
FIGURE 1.10 “DEVELOPED THEMATIC MAP: IMPEDIMENTS OF NEW CRAs” .....	210
FIGURE 1.11 “DEVELOPED THEMATIC MAP: NOTCHING FOR RISKS” .....	211
FIGURE 1.12 “DEVELOPED THEMATIC MAP: NOTCHING FOR COMPETITION” .....	212
FIGURE 1.13 “DEVELOPED THEMATIC MAP: TYING” .....	213
FIGURE 1.14 “TYPICAL TRANCHING SCHEME” .....	233

## **Dedication**

This thesis is dedicated:

To Veronica, for your astonishing love and support and for proving that, beyond giving loyalty, I can also receive it, undeservedly.

To the enduring yet amazing memory of my father, Mathias Ben Cyril Onjewu.

(1951 – 1992)

To Martha - my ever-faithful mother, for your audacity, priceless example and gift of education.

To Jane – my loving sister, for your extraordinary loyalty.

To Salomy S. Krishna, my teacher and friend, for believing.

Finally, to God my creator, 'this poor man called and the Lord heard him, he saved him from all his troubles'.

(Psalm 34:6)

## **Acknowledgment**

The odds of undertaking a Ph.D. at Plymouth or anywhere else are pretty bleak when you are born in the suburbs of Kaduna (in Nigeria) and orphaned at age seven. Defying these odds, even with the best spirit and endeavour, only goes the length of a short distance. Therefore, for the most part of my journey, I have relied upon the help and support of so many remarkable individuals whom I would like to thank directly and sincerely.

I am forever indebted to my mom, Martha, for her incessant love in the face of challenges. As an academic with a Ph.D. herself, she inspires my love for academia and her absolute commitment to further education remains an abundant source of encouragement. Mom, I thank you for being brave enough to send me to Malaysia and then to the UK. I am sure Dad is beaming with pride for you and I am just in awe of what you have done. I also thank my ever-loving sister, Jane Ben-Onjewu, for her curiosity and forthright interest in my development. For as long as I can remember, my Aunt, Big Ene, has shown me boundless love and affection I am amazed at the size of her heart. I hope I have done her proud.

I express my deepest gratitude to my Director of Studies, Professor Salima Paul, for giving me the chance to take my education to the pinnacle. Professor Paul has been incredibly supportive, thorough and relentless in shaping this project and, most importantly, my character. Without you, Professor, this journey from Kaduna to Plymouth would never come full cycle so I thank you wholeheartedly. I must also thank my second Director of Studies, Dr. Basel Awartani, for being a calming influence and supplying the incredible humour needed in the anxious periods of this study. Thank you a great deal, Basel.

On the professional side, I am grateful to colleagues at the Futures Entrepreneurship Centre at Plymouth University where I was first appointed Lecturer in Entrepreneurship. I met Dr. Emily Beaumont in July of 2015 and how oblivious was I that that first interaction would turn out to be a total lifeline and my road to Damascus. Dr. Beaumont, I could acknowledge you for so many things but I would just like to thank you for your open-mindedness. Because of you, this journey from Kaduna continues. I should also express emphatic thanks to Dr. Haya Al-Dajani who, over a very short period, has become a most approachable mentor and a great counsel. Also, I thank Dr. Andreas Walmsley for being of tremendous support and an aggressive listener beyond compare. To Elena Novakova and Amber strong, your collective weirdness aside, you are the best company in all of the South West and I have been terribly lucky to work with you. Penny Hele, well, what could I say? You are a kindred spirit. I could not possibly forget Helene Bryant for brightening up the mood every time and Dr. Marta Hawkins for her kindness and support. I also thank Jeannine Levers, Sarah Stevenson, Sybille Schiffmann, Sarah Preedy, Judith Reynolds and Dr. Nikolaos Apostolopoulos for the camaraderie. The stint at the Futures Centre made it possible for me to transfer to the International Centre for Transformational Entrepreneurship at Coventry University. I must thank Dr. Joan Lockyer, Dr. Kelly Smith, Professors Gideon Maas and Paul Jones, Barbara Jaszczuk, David Wick, Dr. Cherisse Hoyte, Dr. Arun Sukumar, Dr. Sunita Dewitt, Dr. Pete McLuskie, Angela Williams, Zimu Xu, Rebecca Fisher, Professor Richard Tomlins and Dr. Stephen Dobson for the warm welcome and terrific banter.

At the University of Hertfordshire, I am grateful to Sue Anderson and her partner Duncan Margetts for being out-of-this-world ever supportive friends. I also thank Aalok and Sushma Kiri, Brandon Crimes, Lizana Latif, Dr. Suzie Du, Dr. Tassos Patokos, Dr. Mariana Dodourova, Matthew Townsend, Hannah Oldfield, Helen Wright, Katie Hopkinson, Kate Yiannacou and Mike Rosier for experiences that continue to linger. It was at Hertfordshire that my attention was first drawn to credit rating agencies and for that I am indebted to Dr. Rajiv Maluste of the London School of Economics for showing me the way and supervising my MSc. dissertation to great success.

On a personal note, I owe Femi and Tracey Oyemomi a huge debt for their special friendship and affection. You both and Michele are the very best. I thank Dr. Mohamed Haddoud, who introduced me to Dr. Beaumont, for being a steadfast friend; I am just chuffed that fate has kept us together. To Dr. Lise Hunter, thank you for your immense interest in my welfare and career. I pray for the chance to repay you someday. Thank you too to Dr. Paul Igwe for your wonderful friendship, and to Dr. Imane El Hakimi, Dr. Ali Elwerfelli, Mamata Dhakal and Sophie Kong for making this Ph.D. journey a hilarious ride. George Dexter, Andy Brown, Dr. Dominic Appiah, Samuel Ayertey, James Smith, Dr. Fawzy Alawady, Dr. Shukor Harun, Noor Hasanuddin, Dr. Ibrahim Alhaj, Dr. Khaleed Alotaibi, Dr. Sherif Ismail and Dr. Ahmed Hassanein have also been a fantastic group to be surrounded by. I must also mention Dr. Helen Mortimore, a kind spirit and an authentic character whom I missed the chance to know better. I could not possibly forget Dr. Winnie Mujah at INTI University Malaysia, my best ever teacher and a great motivator who gave me the first shot and taste for teaching. Now, many years after, I still use Dr. Mujah's timeless notes in my own teaching. Also in Malaysia, thank you to Dr. Cheah Sin Chye for your support during my undergraduate degree and to the Rev. Dr. Sherman Kuek, an extraordinary pastor, and his family for a friendship that transcends distance.

Back in Kaduna and at home where it all began, I thank the Idah, Ikama, Alubo, Omoogun, Yusuf-Agbo, Umore, Sati and Udeagwu families for their support and good wishes. They are the village that raised the child. I am indebted to the encouragement of Dr. Alex Momoh, Bishop Matthew Kukah, Archbishop Matthew Ndagoso and Rev. Sr. Hanaa Ishak for her love and kindness. Also to Fr. Edward Sati, Fr. George Odafe and Fr. Barnabas Samaila for their fraternal companionship. I am also indebted to my friends Femi and Ayo Omoogun, Williams and Eunice Obande, Matthew Adoga, Tope Ali, Gahtan Aziz, Agernor Ugba, Asor Adudu, Joshua Echoi, Daniel Achiyyi, Peter Onuh, Shehu Zubairu, Ogiri Odangla, Nathaniel Wambebe, Francis Iyamabo, Patrick Abuah, Chimezie John, Beno Yero and John Garba for being the best lads a boy could wish for.

Finally, I salute Veronica – my resilient soulmate. No more excuses, now we can live our lives to the fullest!

### **Author's Declaration**

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University research award without prior agreement of the Graduate Committee.

This project was part-funded by the Plymouth Graduate School of Management.

Word count of main body of thesis: 67, 027 words.

**Signature:**

A handwritten signature in black ink, appearing to read 'Euan H. Smith', is written over a faint, illegible printed name.

**Date:** 18 January 2018

## CHAPTER ONE: INTRODUCTION

### 1.0 Introduction

A profound and frequently cited quote in the credit literature is the assertion made by a former Congressman, Daniel Webster, at the US Senate in 1834. He affirmed that:

‘commercial credit is the creation of modern times and belongs, in its highest perspective, only to the most enlightened and best governed nations. Credit is the vital arm of the system of modern commerce. It has done more, a thousand times more, to enrich nations than all the mines of the world’ (Sinclair, 1994:1).

It may be added that the attraction to credit goes hand in hand with the need for credit ratings. Indeed, for more than a century, credit rating agencies (CRAs) have offered the vital service of independent risk assessment and information-signalling to the debt market to enable the flow of commercial credit (Sinclair, 1994; Partnoy, 2001; White, 2001; Langohr and Langohr, 2010). However, public interest in the activities of CRAs has been growing in the aftermath of the 2008 financial crisis due to a perception that they misled investors by underestimating risks particularly in structured assets<sup>1</sup> (He *et al.*, 2014; Bakalyar and Galil, 2014; Duff and Einig, 2009). This increasing public interest in CRAs, added to well-publicised disputes in the sovereign ratings of some major countries (Alsakka *et al.*, 2015; Petit, 2014), has led to calls for a more competitive and less concentrated credit rating industry (Duff and Einig, 2015).

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<sup>1</sup> Structured assets in structured finance are financial arrangements through which issuers compensate investors using the income from an underlying asset, as opposed to compensation made from the issuer's own cash flow.

What, then, is a credit rating? It is 'an assessment of the creditworthiness of a corporation or bond based on the issuer's quality of assets, its existing liabilities, its borrowing, repayment history and its overall business performance. As a financial service, credit ratings predict the likelihood of default on issuers' financial obligations and signals the expected repayment in the event of default' (Becker and Milbourn, 2011:499). The three main types of credit ratings are corporate ratings, bond ratings and sovereign ratings. Firstly, corporate ratings represent the creditworthiness of an entity offering debt obligations to the market (ibid). Secondly, bond ratings represent the quality of debt securities traded by corporate entities (ibid). Thirdly, sovereign ratings represent the relative creditworthiness of governments (Gaillard, 2011). Generally, assessments of creditworthiness are expressed through alphanumeric rating scales<sup>2</sup> that signify high, medium and low levels of creditworthiness (McNamara, 2012).

Not coincidental, the firms that have developed this common rating scale are the principal players also known as the 'Big Three'<sup>3</sup> of the credit rating industry: Moody's, Standard and Poor's (S&P) and Fitch. Together, the Big Three share more than 90% of the global market in spite of the presence of other agencies that have been recognised by the Securities and Exchange Commission (SEC) in the US<sup>4</sup> (Coskun, 2008; Shorter and Seitzinger, 2009). Notwithstanding the escalating doubts about their conduct in the financial crisis the Big Three continue to exert growing influence on investors' decision making as they issued 96.6% of all ratings

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<sup>2</sup> A standard industry alphanumeric rating scale is presented in Table 3.

<sup>3</sup> Hereafter, this study refers to Moody's, Standard & Poor's and Fitch as the Big Three or the incumbents.

<sup>4</sup> The SEC awards the National Recognised Statistical Rating Organisation (NRSRO) status to eligible rating agencies that fulfil a set of criteria.



in the US in 2013 (SEC, 2014) and 91.9% of all ratings in Europe in 2015 (ESMA, 2015). For this reason, academics and regulators continue to contemplate the reasons for the paucity of competition and alternate CRAs servicing market participants.

Thus, it is this dilemma of the lack of competition facing regulators, academics and other interested parties that has informed this study. The study has been conceived to explore the factors that confer unparalleled market power to the Big Three by focusing on the alleged practices of notching and tying. Firstly, notching is defined as 'a predetermined methodology to discount ratings of other CRAs on the basis of the type of structured products and rating category' (Staikouras 2012: 92). Secondly, tying is 'the practice of a seller conditioning the purchase of one product on the purchase of another product' (Viscusi *et al.*, 2005:226). Currently, both practices could be best described as under-researched in the credit rating literature. Hence, in an attempt to explore these phenomena, the study reviews the literature in search of factors that directly and indirectly affect the competitive situation in the rating industry. Successively, using a constructed theoretical framework, the study investigates notching and tying and collects data using semi-structured interviews. Furthermore, using a strictly Braun and Clarke (2006) approach to thematic analysis, the study analyses and reports on key themes developed from the data. Finally, the study concludes by specifying its contributions to the field of credit rating research, it then clarifies its practical and policy implications and lastly, it makes recommendations for future research.

The rest of this chapter is organised as follows: Section 1.1 sheds light on the background and rationale for this study. Section 1.3 cites the research aim and enlists the research objectives. Section 1.4 describes the novelty of this study in the fields of financial regulation and credit rating research. Finally, section 1.5 outlines the structure of this study.

### **1.1 Background and Rationale**

The State takes an expressed interest in competition in markets delivering goods and services that serve the good of the public (Duan and Laere, 2012). The guarantee and the protection of welfare has been the mandate of the State through all ages of civilisation. One such mandate is the sustenance and maximisation of financial welfare (Walter, 2004). Through a delegated mandate embedded in financial regulations that warrant credit ratings, CRAs have had a role to play in the financial welfare of the public. This role has been questioned in the European sovereign debt crisis not because they downgraded sovereign and corporate bonds that reduced public welfare but because of the manner and haste in which the downgrades occurred (Möllers, 2009). Thus, the simultaneous downgrade of \$9 billion worth of European commercial paper by Moody's and S&P in late August 2007 has been described as a 'rash move' (Henry, 2007:1). Accordingly, the impact of sudden downgrades announced by the Big Three and the market response in withdrawing capital and activating call options was down to the important and quasi-regulatory role that CRAs play. CRAs simply possess delegated powers to certify the creditworthiness of valuable financial and non-financial institutions (Darbellay, 2013).

Furthermore, with such powers bestowed on CRAs come responsibilities. Therefore, there is a growing sentiment within academia and in financial services that CRAs did not foresee the events that led to the debt crisis and that the ratings awarded to financial obligors and obligations were more or less inflated (Hill, 2012). This is explained by the fact that ratings did not eventually reflect firms' or securities' ability to pay their debts in full and on schedule and severely deviated from any range of accuracy (McNamara, 2012). However, some of the sentiments levelled at CRAs precede the financial crisis and they centre on their weak rating methodologies, collusion with bond issuers, self-regulation, the issuer-pay model<sup>5</sup> and the oligopolistic market structure (Cantor and Packer, 1994; White, 2001; Petit, 2011; Gunter and Xia, 2012; Darbellay, 2013). To allay these concerns, the European Union (EU) enacted the first European legislation to govern CRAs in April 2009 and it passed as Regulation 1060/2009 of the European Commission (EC). Among its requirements, CRAs were barred from providing advisory services to their clients and were disallowed from rating financial instruments without sufficient data to inform ratings. CRAs were also directed to disclose the models, methodologies and assumptions of their ratings and to publish annual transparency reports.

Consequently, further consultations made by the EC in November 2010 and in June 2013 have since produced two new bills to improve Regulation 1060/2009. Respectively, Regulations 513/2011 and 462/2013 have been enforced to address concerns on weak rating methodologies, collusion with bond issuers, self-regulation

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<sup>5</sup> The issuer-pay model is a rating pricing arrangement in which issuers pay an upfront fee to CRAs in exchange for a default risk assessment.

and conflicts of interests arising from the issuer-pay model. However, these regulations and their directives have not assuaged the particular public concern on opening up the rating industry to competition. In view of the above and in response to the public and academic interest in a competitive rating industry, the aim and objectives of this study are now presented in the succeeding section 1.2.

## **1.2 Research Aim and Objectives**

The aim of this study is, firstly, to explore empirical evidence on the anticompetitive behaviour of CRAs by investigation rating analysts and underwriters in the credit rating process<sup>6</sup> that occurs in the financial market<sup>7</sup>. Secondly, this study aims to investigate how these anticompetitive behaviours restrict new CRAs trying to enter into the industry. The definitive objectives of this research are to:

1. offer insights into the oligopolistic nature of the rating industry using thematic analysis
2. identify the barriers to competition in the rating industry
3. ascertain the presence of notching and tying practices in the rating process
4. examine, empirically, the drivers of notching and tying in the rating process and investigate their effect on new entrants into the rating industry.

Furthermore, this research improves existing studies on CRAs by being novel in a number of ways. Firstly, it is the first independent study on notching and tying to the best of the investigator's knowledge. Secondly, in comparison to previous studies, it is unique in obtaining primary data from rating analysts and underwriters to observe

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<sup>6</sup> The rating process is the interface between issuers, usually represented by underwriters, and rating analysts for the purpose of information exchange to determine the probability of default for a financial obligor or obligation.

<sup>7</sup> 'A financial market is considered to be a forum for the exchange of financial products, represented in some cases by a physical location, but in others by a common information system sharing data on prices and volumes transacted, and where a number of professionals take an active part in the processes of the market' (Fell, 2000:18).

notching and tying. Thirdly, it offers further evidence on the assumptions made by analysts and underwriters in the rating process. Lastly, it provides first-hand evidence for policy makers on the interests and strategic actions of rating analysts and underwriters in the rating process.

### **1.3 Structure of the Study**

The rest of this thesis is organised as follows:

Chapter two reviews the literature and commences with an evaluation of the purpose of CRA regulation. It searches existing literature to expose the issues that surround and define competition in the rating industry, including notching and tying. Successively, the literature review evaluates the very limited prior studies on notching and tying and concludes by explaining the rating process.

Chapter three suggests a theoretical framework and develops a mechanism to investigate the anticompetitive behaviours of notching and tying. In addition, it designs a system of interaction to accommodate other factors that impede new CRAs from entering into the market and thus uphold the oligopoly. The theoretical framework makes an argument about why this study matters and demonstrates a link between the theory and the expected findings.

Chapter four explores the various paradigms of inquiry and rationalises the choice of a social-constructivist paradigm in this study. It goes further to compare inductive and deductive research approaches and considers the characteristics of quantitative and qualitative research strategies before choosing the latter. It

concludes by appraising various qualitative research designs and then focuses on the strengths of thematic analysis.

Chapter five proceeds to clarify the difference between methodology and methods. It introduces the thematic analysis research design and contemplates the primary questions and decisions needed to undertake thematic analysis. It goes on to address important issues regarding the study's data collection protocol, sampling method, location, data collection instrument and access to participants. It concludes by noting the ethical parameters of this study.

Chapter six demonstrates the thematic analysis and presents the findings of the study. It undertakes the analysis of the data using stages 1 – 5 of Braun and Clarke's (2006) six stage model for thematic analysis. These stages are familiarisation with the data, the generation of initial codes, the search for themes, the review of themes and the definition of sub-themes.

Chapter seven the study discusses the findings and completes stage 6 of Braun and Clarke's (2006) six stage model for thematic analysis – the production of a report. Hence, the chapter goes beyond description of the data to create an account of arguments in relation to the research questions. The chapter also explains how the findings fit with existing knowledge.

Chapter eight summarises the thesis and reiterates its contribution to knowledge, practice and public policy. It also identifies the limitations of the study and outlines areas for future research.

## **1.4 Conclusion**

This chapter has presented the background and rationale, the aims, objectives and contribution of this study to the field of credit rating research. It has also presented the structure of this study while intimating on the content and approach of the succeeding chapters. To reiterate, the main aim of the current study is to explore empirical evidence on the anticompetitive behaviour of CRAs by investigating rating analysts and underwriters in the credit rating process and the consequences on new CRAs trying to enter into the industry. The importance of this study lies in its independence in comparison to similar studies. The current study is also novel in improving existing literature by observing both rating analysts and underwriters. The next chapter reviews the literature on the purpose and dynamics of CRA regulation.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

The previous chapter presented the objectives of this study which include ascertaining the impediments of new CRAs as well as empirically examining the drivers of notching and tying in the rating process. It also shed light on the contribution of this study to the field of credit rating research and presented a structure for the remainder of the thesis. The current chapter complements chapter one by providing insights into the industry and the external factors that have an influence on competition in the rating industry. This chapter presents a discourse on the purpose of CRA regulation by the State. It then introduces the dynamic issues that define competition in the rating industry to draw out themes for more in-depth discussion in the rest of the literature review. It concludes by reviewing past studies on notching and then it describes the rating process.

### **2.1 The regulation of CRA Competition by the State**

A preliminary question that arises is why and how the State should interfere with the credit rating industry. Dittrich (2007) suggests that the relationship between the State and CRAs is a difficult one because of the diversity of interests in the area. The main goal of rating based regulation is a functioning reputation mechanism that provides quality ratings that the State relies on. Dittrich (2007:98) adds that credit ratings are a crucial commodity for the financial sector, hence the State is 'anxious' about structural risks and so in order to avert systemic market failure it seeks to improve the wellbeing of society at large by supervising the activities of CRAs.



Equally, Andenas and Chiu (2013) affirm that the objective of financial stability is the protection of investors. As a result, CRAs increasingly find themselves in the realm of public policy following the Sarbanes–Oxley Act (SOX) of 2002<sup>8</sup>, the Credit Rating Agency Reform Act of 2006<sup>9</sup>, the Dodd-Frank Act of 2010<sup>10</sup> in the US and the adoption of new rules by the EU in 2009 to control CRA's conflict of interest and concerns over transparency. White (2010) considers two possible but alternative routes for CRAs supervision: either to tighten CRAs' regulation or to lessen the statutory requirements of CRAs' services. Whatever the purpose of CRA regulation, there is a strong public opinion that new controls and supervision are only in reaction to failed ratings and the scandals that have ensued in global financial services. Examples of these are the Dotcom bubble<sup>11</sup> in the early 2000s, the Enron scandal in the US that precipitated the enactment of SOX (Pinto, 2006) and the US residential mortgage crisis in 2007 and 2008 (Darbellay, 2013). In Europe, examples are Regulation 1060/2009<sup>12</sup> and its spinoffs following the debt crisis in 2008. Yet, it will not suffice to say that the sole intent of CRA regulation is a reactive one to pacify the public and restore stability to the financial markets.

On the contrary, the purpose of financial regulation is also to protect against systemic risks and to sustain financial stability (Balling, 2004). Systemic risks are

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<sup>8</sup> The Sarbanes–Oxley Act of 2002 demanded the SEC to provide congress with a report on the credit rating industry and the NRSRO system. The NRSRO system is explained in section 2.4.

<sup>9</sup> The Credit Rating Agency Act of 2006 was designed to improve rating quality by encouraging accountability, transparency and competition in the industry.

<sup>10</sup> The Dodd Frank Act of 2010 conceded that regulations based on ratings undermined the normal functioning of market forces in the rating industry.

<sup>11</sup> The Dotcom bubble was the collapse of the share prices of internet and internet related firms in March 2000. The affected firms had experienced an initial period of boom based on a speculation that the internet and e-commerce afforded higher profitability for greater profits. However, many of these firms later filed for bankruptcy as they could not generate sales from their speculative customer base (Kohn and Pereira, 2016).

<sup>12</sup> As explained in section 1.1.

the possibility that ‘the failure of one large institution would cause other institutions to fail’ or the possibility that ‘an event could broadly affect the financial system rather than just one or a few institutions’ (Williams, 2009:1). Similarly, financial stability is the steady maintenance of the key institutions and markets that comprise the economy or the economic community as in the case of the EU. Setty and Dodd (2003:1) note that ‘the goal of new policies should be to improve transparency, increase investor education, level the playing field for all investors, safely stimulate competition between rating agencies, increase investment in research and coverage of developing countries’ financial markets and protect the independence and quality of credit ratings’. Ultimately, for the State, the crucial purpose of regulating CRAs is the production of high quality ratings since it ‘explicitly relies’ on them (Dittrich, 2007:98).

## **2.2 Dynamics in the Regulation of CRAs for Competition**

It is widely known that Moody’s, S&P and Fitch dominate the rating industry (Langhor and Langohr, 2010; Darbellay, 2013; Duff and Einig, 2015). In fact, some experts refer to the market as a duopoly and not an oligopoly as thought by others (Tichy, 2011; Darbellay, 2013). On Fitch’s influence, Becker and Milbourn (2011:1) stress that Moody’s and S&P dominated the credit rating industry until the ‘material entry’ of Fitch. This explains why Petit (2011:10) describes the market as a ‘shared, narrow oligopoly’. Therefore, recognising Fitch’s geographic spread (particularly in Europe and Latin America), its market recognition, influence and inclusion in academic research, it has a sufficient enough presence to classify the rating industry as an oligopoly (White, 2010). In agreement, Coffee (2006:284) supports this claim by affirming that since the early 20th century Moody’s and S&P

dominated credit ratings until Fitch developed a 'toehold in some specialized submarkets'. More to the point, Carron *et al.* (2003) argue that while Fitch rated fewer bonds than Moody's and S&P, it had the highest percentage growth rate by rating a slightly higher number of residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS) in the late 1990s and early 2000s. This validates the claim by Hill (2012) that Fitch has made inroads in the structured finance market.

Although Hill (2010) believes that the rating industry is concentrated due to the difficult strategies that new entrants can or cannot employ, Dittrich (2007) believes that the rise of Fitch in the ratings industry is down to financial innovation in the structured finance market and the conglomeration of smaller CRAs through mergers and acquisitions. Indeed, Becker and Milbourn (2011) cite Fitch's inclusion in the Barclays Capital Index (formerly Lehman's Capital Index) in July 2005 as a quantum leap towards its market recognition. Fitch had existed as a publishing company since 1913 but in 1997 it merged with the UK based IBCA Ltd. and acquired Duff and Phelps Credit Rating Co and Thomas Financial Bankwatch, both of Chicago, in 1997 and 2000 respectively (Bestel and Baesens, 2008). Being a relatively young firm but with a longstanding reputation, Fitch used its flexibility to develop a strong position to emerge as a formidable third player in the rating of newly invented bonds and re-securitisations in an undersupplied market (Dittrich, 2007). Effectively, Fitch successfully transferred its reputation in the publishing business to the rating business by leveraging the competencies of existing suppliers through mergers and acquisitions. This underlines the importance of reputational capital in the rating industry especially in the US where recognition by

the Securities and Exchange Commission (SEC) requires a history in providing ratings, a savvy workforce and a reputation in the market.

By and large, the rating industry exhibits certain network effects because the market demands a common and consistent language to assess risks. The Big Three CRAs have established such a rating nuance and developed an extensive distribution and coverage over many decades to provide risk analysis and comparison solutions even though by so doing they have created a disadvantage to newcomers (Fons, 2008; Portes, 2008). This disadvantage manifests in the thriving oligopoly which accounts for a lack of competition in the industry<sup>13</sup>. Darbellay (2013) believes that the state is responsible for creating the appropriate incentives for competition that will restore discipline in the industry, especially through discarding rating-based regulations in the financial market. The argument is that oligopoly will prevail until the State curbs its excessive use of ratings to supervise financial institutions. Hence, Darbellay (2013) asserts that CRAs will be incentivised to deliver more informational value to issuers in a system where ratings demand is not a regulatory requirement. In theory, this will lead to an appropriate market structure where incentive based competition will thrive due to the normal functioning of market forces.

Thus, in proposing the removal of rating-based regulation to create a system driven by market forces, the State's attitude toward price<sup>14</sup> is something to be considered. Dittrich (2007:99) stresses that, generally, the State is only concerned with price

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<sup>13</sup> The consequences of the oligopoly are, firstly, 'the devastating effects of rating downgrades by the leading CRAs' (Darbellay, 2013:165). Secondly, 'the Big Three enjoy a certain privilege since market participants have little alternative to their ratings (ibid:168).

<sup>14</sup> Here, price refers to the rating fees paid to CRAs by bond issuers.

when it affects the quantity supplied: 'monopolies are harmful if their price increases reduce quantities compared to a more competitive state. Such behaviour can lead to an overall loss of welfare commonly called dead weight loss'. In the case of the ratings industry, a dead weight loss will only exist if toxic bonds were floated in the market as a result of issuers demanding fewer ratings. To turn the question posed by Darbellay (2013) on its head, will issuers consume the same quantity of ratings in an incentive-based market? Dittrich (2007) thinks that issuers are willing to pay higher fees for ratings because they value them so highly. This means that the demand for ratings is inelastic to the price of obtaining them; therefore, all other things being equal, issuers will consume the same ratings in spite of price changes.

In comparison, in non-financial markets with only few players, the State uses its regulatory powers to keep new entrants out of the market by keeping prices low (Tirole, 1988). This is not the case with the rating market because the State has not been involved in setting rating prices to restrict the market. On the contrary, for example, the EC has openly called for new CRAs to enter the market through Regulation 1060/2009 (European Commission, 2010). Yet, as things stand, the Big Three set their prices just below the point where issuers will switch to small, emerging CRAs (Dittrich, 2007). It is at this point that economic incentive is currently maximised in the industry and this is driven by the organisational economies of scale and scope enjoyed by the Big Three.

However, even if the State is disinterested in prices that do not affect quantities and public welfare, it is interested in the high quality of ratings for the reason that it explicitly relies on them for far-reaching financial stability. What, then, is the

relationship between quality ratings and the level of competition in the industry? And is competition worth regulating for? It would be too simplistic to suggest that the entry of new CRAs will enhance quality ratings that represent the true ability of issuers to pay their debts in full and on schedule upon maturity. On the contrary, Becker and Milbourn (2011) show that the entry of Fitch into the rating industry has had a negative effect on the quality of ratings. An explanation for this negative effect could be the mooted conformity bias in the rating industry. The quality, timing, upgrade and downgrade of ratings across CRAs tend to correspond because there is an institutional hesitation to contradict the judgment of other CRAs competing for the same finite pot of rating fees. Dittrich (2007:106) argues that 'the relative reputation gain from being first with a drastic rating change that proves correct over time is smaller than the relative reputation loss from a drastic rating change that proves to be wrong'. Theoretically, the incumbent CRAs tow the opinions of each other and this poses a structural risk<sup>15</sup> that defeats the purpose of competition.

Although scholars do not agree on the nature of competition that is needed in the industry (Becker and Milbourn, 2011; Jeon and Lovo, 2011; Malik, 2014), the majority have linked CRAs' oligopoly to the excessive reliance on ratings (Hunt, 2008; Partnoy, 2009; Staikouras, 2012; Darbellay, 2013). Seemingly, this overreliance stems from regulations that support the protection of the Big Three and their reputational capital and thus, generating steady revenue for the most reputable CRAs (Partnoy, 2006; Darbellay, 2013). Indeed, Partnoy (2006) and Darbellay (2013) also argue that it is market forces and not new entrants that can

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<sup>15</sup> Structural risks are shocks that may arise due to poor oversight or overdependence on a small number of service providers.

pose sustainable competition to CRAs if and when credit ratings cease to be required by binding financial laws. However, Staikouras (2012) contends that competition is unlikely to arise with the removal of rating-based regulations because the rating market is naturally oligopolistic. In the same vein, Dittrich (2007:138) believes that the rating industry 'is a natural oligopoly at best' because of the 'exceptional strong forces hindering competition' like the established reputation and greater resources of the Big Three.

In the grand scheme of things and under normal conditions, the free interplay of market forces would create market efficiency before competition. The rating industry is by its very nature an imperfect market where market participants legally profit from undisclosed information or the access to it because of binding confidentiality rules and the maintenance of trade secrets that underlie financial services. Thus far, this partly explains why it has been difficult for researchers to define the essential market forces that can create market efficiency and/or competition in the rating industry, if any. While, Setty and Dodd (2003:7) posit that 'the ability of the three firms to dominate a global market is not simply regulatory protection but can more reasonably be attributed to the product of mergers and acquisitions, increasing economies of scale for the large firms and the high fixed costs of building a national, if not global, reputation', - these are partly structural factors and not entirely market factors.

There is also an argument that if market participants carry out independent due diligence they will ultimately demand less ratings thereby making ratings less

attractive (Darbellay, 2013). In other words, due diligence will compete with credit ratings. Yet, on average, high net-worth investors will have to pay in excess of \$0.5m to carry out due diligence on 10 to 20 hedge fund investments (Scharfman, 2009). The stated amount could be a financial disincentive to investors and Bonsall (2012) contends that issuers of debt have a greater incentive in paying for ratings than do investors because they have a more urgent need for finance. For investors, single letter ratings that represent distilled information from CRAs remain attractive for ease of use and for being free of charge (Mathis *et al.*, 2009; White 2010).

Still, an interesting dynamic in the rating industry is the sluggishness of innovation. CRAs, unlike other enterprises, cannot create products or offer services that create new markets. Rather, CRAs fulfil the needs of an existing financial market and this makes the entry of new suppliers with alternative offerings a nearly impossible prospect (Dittrich, 2007). Nonetheless, CRAs can be innovative along the lines of financial markets as is the case with structured finance when asset backed securities created a new wave of rating demand for CRAs. This period of innovation from 1995 onwards coincided with the emergence of Fitch and is partly responsible for the company's rise in the market as it had the lean organizational structure needed to respond flexibly and adroitly to rating demand by leveraging the competences of the companies it had merged with or acquired (Jewell and Livingstone, 1999). On Fitch's part, this can be classified as process innovation because it used its small but agile size as a competitive advantage against the domination of Moody's and S&P (Dittrich, 2007).



A concluding caveat for increasing the number of CRAs is a peculiar market environment where CRAs allegedly compete for revenue and not quality ratings. The concentration of few players in the industry means that CRAs may forgo the quality of services provided (Rousseau, 2005). Hill (2012:140) is convinced that CRAs do not vigorously compete on quality of ratings because of the 'sticky' market norms that dictate the industry. Therefore, it is still not clear whether new players in the industry will increase the level of quality ratings (Rosner, 2009).

In order to review in-depth all the major issues and dynamics of competition in the rating industry, this next sections will proceed to appraise the following constructs from the literature, namely: market structure, oligopoly, economies of scale, rating quality, network effect, the two rating norm, rating pricing, reputational capital, mergers and antitrust behaviour, notching, tying, unsolicited ratings and finally, the rating process.

### **2.3 Market Structure of the Rating Industry**

A market structure refers to the number of firms offering similar products or services in an industry (Tirole, 1998). These structures could range from monopoly, duopoly or oligopoly up to situations of perfect market competition where there is no barrier to entry and the demand curve is perfectly elastic with an infinite number of suppliers (ibid). The introduction to this section established that the rating industry is an oligopolistic market with the Big Three controlling upwards of 90% of the market (Hemraj, 2015). As the Big Three profited from the growing trade of structured finance in the mid-2000s, their revenues doubled from \$3 billion in 2003 to \$6 billion in 2007 (Möllers, 2009). Moreover, Darbellay (2013) estimates that the

industry peaked at this \$6 billion mark as the Big Three issued 98% of the ratings and collected 90% of the revenues in 2011<sup>16</sup>.

One explanation for the oligopoly is the financial burden of being a Nationally Recognised Statistical Rating Organisation (NRSRO) placed on new CRAs. The NRSRO certification is a badge of operational quality that is required by the Securities and Exchange Commission (SEC) in the United States. To be NRSRO certified, desiring agencies must demonstrate a minimum of three years history in rating profitable bonds, have an experienced workforce, be an independent operation and possess internal procedures to manage conflicts of interest in place. In comparison to their bigger counterparts, smaller CRAs face higher costs in their attempts to be NRSRO certified due to their relatively low revenues. In any given year it can cost a small rating agency up to \$500,000 to retain its NRSRO status (Brown, 2010). In some cases, small CRAs relinquish their NRSRO status after a few years when the investment does not yield enough returns (Allen, 1984). In fact, NRSRO certification is a sunk cost that new CRAs need to enter the industry but, soon after, profits are still dissipated by the cost of market entry. Yet, 'recognition by the SEC as an NRSRO is important because most rating-dependent regulations make reference to only those select few agencies designated by the SEC as NRSROs' (Cane *et al.*, 2012:1076). Hence, in spite of the financial burden, new CRAs continue to covet NRSRO status.

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<sup>16</sup> Data presented in table 2 estimates the Big Three's revenue to be \$.9.9 billion in 2015, higher than pre-crisis levels.

Another explanation for the oligopoly is the obstacle of compatibility for newcomers: market participants are uncertain on whether newcomers have the capacity to provide the same quality as the incumbents (Becker and Milbourn, 2011). Issuers are also concerned about investors accepting newcomers' ratings as fully compatible even when they provide informational quality in their first period in the market. Hence, investors need time to fully accept newcomers to be at par with the reputation of the incumbents (Dittrich, 2007).

In addition to rating services, CRAs offer various ancillary products including market data, advisory/consultancy services and risk management solutions. Conversely, there is a concern that these services compromise CRAs' independence (Duff and Einig, 2009) because they increase familiarity and interaction between CRAs and issuers and purportedly compromise the former's willingness to report the credit breaches of the latter. It may also lead to CRAs being unwilling to downgrade an issuer in order to sustain other lines of business. Furthermore, there is a contention in the literature that small and new players tend to focus on narrow segments or locations in the market that are relatively less profitable and perhaps of less influence in the market. For example, A.M. Best, Dominion Bond Rating Service (DBRS) and Egan-Jones Ratings (EJR) are CRAs that operate in narrow segments to survive in the market (Naciri, 2015). In the main, A.M. Best is a world leader in the rating of insurance firms, while DBRS is a market leader in Canada (Langohr and Langohr, 2010) and EJR is a leading provider of proxy services (ibid).

To elucidate the focus of smaller CRAs on narrow and less profitable segments and locations, table 1 illustrates the diversity of CRAs registered in Europe by the

European Securities and Market Authority (ESMA) as at September 2015, along with their primary locations and dates of registration.

**Table 1 CRAs Registered in Europe as at September 2015**

<b>Name of CRA</b>	<b>Locations</b>	<b>Effective Date</b>
1. Euler Hermes Rating GmbH	Germany	16 November 2010
2. Japan Credit Rating Agency Ltd	Japan	6 January 2011
3. Feri EuroRating Services AG	Germany	14 April 2011
4. BCRA-Credit Rating Agency AD	Bulgaria	6 April 2011
5. Creditreform Rating AG	Germany	18 May 2011
6. Scope Ratings GmbH	Germany	24 May 2011
7. ICAP Group SA	Greece	7 July 2011
8. GBB-Rating Gesellschaft für Bonitätsbeurteilung mbH	Germany	28 July 2011
9. ASSEKURATA Assekuranz Rating-Agentur GmbH	Germany	18 August 2011
10. ARC Ratings, S.A. (previously Companhia Portuguesa de Rating, S.A)	Portugal	26 August 2011
11. AM Best Europe-Rating Services Ltd. (AMBERS)	UK	8 September 2011
12. DBRS Ratings Limited	UK	31 October 2011
13. Fitch Ratings	France, Germany, Poland, Spain and UK	31 October 2011
14. Moody's Investors Service Cyprus Ltd	Cyprus, France, Germany, Italy, Spain, UK	31 October 2011
15. Standard & Poor's Credit Market Services France S.A.S.	France, Italy, UK	31 October 2011
16. CRIF S.p.A.	Italy	22 December 2011
17. Capital Intelligence (Cyprus) Ltd.	Cyprus	8 May 2012
18. European Rating Agency	Slovakia	30 July 2012
19. Axesor SA	Spain	1 October 2012
20. CERVED Group S.p.A.	Italy	20 December 2012
21. Kroll Bond Rating Agency	USA	20 March 2013

22. The Economist Intelligence Unit Ltd	UK	3 June 2013
23. Dagong Europe Credit Rating Srl (Dagong Europe)	Italy	13 June 2013
24. Spread Research SAS	France	1 July 2013
25. EuroRating Sp.	Poland	7 May 2014
26. HR Ratings de Mexico	Mexico	7 November 2014
27. Egan-Jones Ratings	USA	12 December 2014
28. ModeFinance S.r.l.	Italy	10 July 2015

ESMA (2015)

Table 1 suggests that of the 28 CRAs in Europe, the Big Three indirectly own 14 agencies and control just below 50% of the market with presence in the leading financial locations of, in alphabetical order, France, Germany, Italy, Spain and the UK. They are well positioned at the doorsteps of the biggest issuers and financiers around the continent and invariably serve the bigger proportion of the market. Indeed, the global dominance of the Big Three holds true in Europe in spite of new CRA registrations as the oligopoly continues to expand and extend its market coverage.

Even though the Big Three dominate the market together, individually, they are fairly different institutions in their structure, revenue base, rating scales and market position. Table 2 presents an organisational and market comparison of the Big Three.

**Table 2 Market Comparison of the Big Three**

<b>Factor</b>	<b>Moody's</b>	<b>S&amp;P</b>	<b>Fitch</b>
1. Founded	1909	1941	1913
2. Parent Company	Moody's Corporation	McGraw Hill Financial	Fimalac and the Hearst Corporation
3. Predecessor Name	Moody's Analyses Publishing Company	Poor's Publishing and Standard Statistics	Fitch Publishing Company
4. Early Business	Financial Statistics Publication	Financial Statistics Publication	Financial Statistics Publication
5. NRSRO Certification	1975	1975	1975
6. Headquarters	New York City	New York City	New York City
7. Revenue (2015)	\$3.5 billion	\$5.3 billion	\$1.1 billion
8. Employees Worldwide <sup>17</sup>	10,400	20,400	3,255
9. International presence/Customer Base	120 Countries	90 Countries	150 Countries

(Source: Annual reports and webpages of the Big Three<sup>18</sup>)

Moody's is the only freestanding agency of the Big Three with the other two being subsidiaries of parent companies (S&P is owned by McGraw Hill Financial, while Fitch is owned by Fimalac and the Hearst Corporation). The founding years do not truly represent the market maturity of the Big Three players because even though S&P appears to be the youngest of the incumbents it, in fact, commenced rating activity before Fitch whose emergence as a force in the rating business only started

<sup>17</sup> Employees worldwide include non-rating personnel across the Big Three.

<sup>18</sup> The annual reports are Moody's (2015), S&P (2015) and Fimalac (2015). The webpages are <https://www.moodys.com/Pages/atc.aspx>, [http://www.spratings.com/en\\_US/what-we-do](http://www.spratings.com/en_US/what-we-do) and <https://www.fitchratings.com/site/about>.

in the 1990s. Historically, all three CRAs started off in the publication of financial statistics albeit with different areas of focus. Judging only by the revenue generated in 2015, S&P would seem to be the market leader and it also employs twice as many as Moody's and ten times more than Fitch. However, Fitch has more international presence than Moody's and S&P due to its aggressive strategy of merging and acquiring smaller CRAs around the world.

Furthermore, all three CRAs are broadly similar in the use of rating scales. Nevertheless, this does not mean that the methodologies used to reach single letter ratings across the Big Three are one and the same as Carron *et al.* (2003) find that it is difficult to determine how the different methodologies used by CRAs result in different ratings or the performance of ratings. The table below describes the Big Three's alphanumeric rating scale:

**Table 3 Rating Scales of the Big Three CRAs**

Ranking	Moody's	S&P	Fitch	Definition
Investment Grade	Aaa	AAA	AAA	Highest Quality
	Aa1	AA+	AA+	High Quality
	Aa2	AA	AA	
	Aa3	AA-	AA-	
	A1	A+	A+	Strong Payment Capacity
	A2	A	A	
	A3	A-	A-	
	Baa1	BBB+	BBB+	Adequate Payment Capacity
	Baa2	BBB	BBB	
	Baa3	BBB-	BBB-	
Speculative Grade	Ba1	BB+	BB+	Likely to Fulfil Obligations, Ongoing Uncertainties
	Ba2	BB	BB	
	Ba3	BB-	BB-	
	B1	B+	B+	High Risk Obligations
	B2	B	B	
	B3	B-	B-	

In spite of the similarities in table 3, it can be observed that the alphanumeric symbols used by Moody's are somewhat dissimilar to the exactly identical symbols used by S&P and Fitch. The relative standardisation of rating scales was first achieved at the end of the 1920s when ratings were divided into categories based on quality (Mallard and Sgard, 2016). Subsequently, full matching and comparison of rating symbols was commonplace since the 1930s even though rating symbols were not like for like (Flandreau *et al.*, 2010). Yet, investors could understand that a B3 rating issued by Moody's was equal to a B- by S&P or Fitch, for instance.

Regarding the methodologies of CRAs, the peculiarity of techniques used to determine ratings in the rating process remains largely undisclosed and unreported



by CRAs. Carron *et al.* (2003) state that CRAs have an understandable reluctance to disclose their proprietary methodologies but what they all share in common is the use of sophisticated qualitative analytical techniques. However, Carron *et al.* (2003) also deduce that Fitch used a technique called 'Stress Scenarios' to assign ratings to CDOs throughout the 1990s. Stress scenarios is a technique that mocks-up possible default rates in different economic states and calculates the level of expected loss as well as the required level of enhancement that will be needed to prevent or recover from such losses. However, the limitation of stress scenarios is that 'statistical approaches are only as scientific as their input data permit' (Rutledge and Raynes, 2010:93-94). Moreover, stress scenarios are point-in-time simulations that fall short of accommodating exogenous and future events that may reduce long-term creditworthiness (Fabozzi and Kothari, 2008).

Furthermore, in spite of the limitations of stress scenarios in the analytical rating process, Watson and Carter (2006) report that Moody's use the binomial expansion technique (BET) while S&P and Fitch use the Monte Carlo Simulation model (MCS) to determine credit ratings. As such, Carron *et al.* (2003) define BET as a method that relies on a high number of simplified assumptions. These assumptions are based on the weighted-average ratings of a pool of collaterals. Similarly, Carron *et al.* (2003) describe MCS as the assessment of bonds within a pool and by observing their historical transition matrix to estimate the default probability of each bond during its expected investment life. Both BET and MCS are the standard of the industry but they may be branded differently inside the CRAs just as Fitch patented MCS as its in-house Fitch Vector Model in 2003 (*ibid*). However, both BET

and MCS are ultimately stress scenarios and thus, they share the shortcomings expressed by Fabozzi and Kothari (2008).

Another important factor in the market structure of CRAs is the popular issuer-pay business model. Since the early 1970s, CRAs shifted from having investors pay for ratings to collecting fees from the issuers of securities themselves. The invention of high-speed photocopy machines has been said to be partially responsible for this shift (White, 2010). The explanation for this is the fact that since photocopiers became commonplace in the 1970s free riding investors could then access, copy, share and distribute information on creditworthiness using these machines. Thus, in the issuer-pay model, an issuer pays an upfront fee for the assessment of its default risk and in case the issuer asks the CRA to publicise the rating, it will pay an additional fee (Jeon and Lovo, 2013). Typically, the rating fee for a new long-term corporate bond issue will range between 4 and 5 basis points of the principal amount. For example, the rating fee for a US\$200 million 10-year bond issue would be somewhere in the region of US\$80,000 to \$100,000 (Langohr and Langohr, 2010). Consequently, the life-span and increased volume of bond issues since the 1970s would suggest that the former investors pay business model would not sustain the operations of CRAs in the modern financial market.

Moreover, White (2010) sheds more light on the shift in the payment model. Firstly, he intimates that the bankruptcy of the Penn-Central Railroad in the 1970s created a shock in the bond market. As issuers became more conscious of the need to persuade investors to invest in their debt instruments, they also became ever more

willing to pay for positive ratings to be made accessible to investors. Secondly, White (2010) states that, like other information providers, the rating industry is a two-sided market where a mix of revenue sources is possible. In the newspaper and magazines business, for example, there could be subscription revenues, advertising revenues, or a mix of both. Thus, the party with the greater incentive in the rating process will be more willing to pay the fees for ratings credit ratings.

Recognising the two sides of the ratings market, Duan and Laere (2012) classify the industry's possible payment models into a sell-side and a buy-side option. When issuers hire the Big Three to issue ratings, they intend to sell a financial product successfully either because potential investors are legally bound to purchase only investment grade assets or because issuers deem credit ratings as necessary information for bond issuance<sup>19</sup>. On the other hand, the payment model could be on the buy-side when investors interested in credit ratings initiate the rating process because they are interested in acquiring debt instruments. However, the latter scenario is increasingly far-fetched as the onus is on issuers to enter the rating process and investors are inundated with investment opportunities with ratings (Pascualy, 2013).

A further account on the shift to the issuer-pay model is the development of the mutual fund industry in the 1970s that required a wide range of ratings to be supplied (Chen, 2004). The subscription fees paid by investors could no longer

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<sup>19</sup> Investors placed a premium on rating-based information over market-based information as the SEC and Basel II accord based capital requirements and recommended investment restrictions linked to credit ratings (Darbellay, 2013).

offset the cost of producing ratings and, at the same time, issuers began to appreciate the need to attract good ratings. Hence, the moral argument persists on who should pay for ratings as there is an assumed conflict of interest between CRAs and bond issuers if CRAs are in a compromising position to favour their paymasters (Strier, 2008). Some have likened the issuer-pay model to a referee being paid by one of the teams in a sporting situation (Mathis *et al.*, 2009). Partnoy (1999) takes the view that, indirectly, investors still pay for ratings through their holdings and the lower profits they make from investing in bonds.

Having reviewed the market structure and undertaken a comparison of the Big Three, it is timely to proceed with a review of their oligopolistic effect of the Big Three in the credit rating industry in section 2.4.

## **2.4 Oligopoly in the Rating Industry**

The first question that springs to mind is: why are there so few CRAs in the market? White's (2001) view is that because bond markets are less developed outside the US, specialised institutions like CRAs are not as needed to solve the problem of information asymmetry. Likewise, Dittrich (2007) argues that the American capital markets practices set the standard around the world. Also, the granting of NRSRO status by the SEC has been few and far between since 1975. After a wave of initial certifications in 1975, many NRSRO certified agencies either merged with or were absorbed by the Big Three. For example, Duff and Phelps was NRSRO certified in 1982, while McCarthy, Crisanti and Maffei (MCM) certified in 1983. Later on, in 1991, MCM was acquired by Duff and Phelps (Gurusamy, 2009; Langohr and

Langohr, 2010). Similarly, IBCA and Thomson BankWatch were only approved as NRSROs for banks and financial institutions in 1991 and 1992 respectively but both are now part of Fitch Ratings through merger and acquisition (ibid).

In the period leading up to 2002, no new agencies were approved in spite of the 24 applications lodged with the SEC from non-US agencies (White, 2001). According to White (2007:50), this was due to 'the SEC's lack of transparency in the NRSRO designation process...an applicant would request the designation and could then wait for an indefinite period that could stretch for years'. Indeed, the suggestion by White (2007) is that stiff NRSRO regulations locked in the rating industry between 1992 and 2002. More to the point, existing NRSROs were exempt from the disclosure rules that restrict other bond analysts, which, to the detriment of potential competitors, gives NRSROs 'broad access to market-sensitive corporate information' (Carron *et al.*, 2003:7). Having said this, there were even fewer rating agencies in financial services before the SEC's certification process began in 1975. White (2001) puts this down to the imperatives of economies of scale and scope, as well as a need for standardisation and reputation in credit ratings.

Thus, a premeditated reason for Fitch merging with IBCA in 1997 was the latter's inability to gain NRSRO approval for bond ratings (White, 2001). On the whole, Hill (2004) is convinced that the US government has enabled the thriving oligopoly in the industry by emphasising NRSRO ratings in various regulatory schemes that increase the demand for them. Perceptibly, the intention of the US government is to create an environment where simplified bond ratings are produced by competent agencies in a standard that is generally understood by the market.

To understand the significance of economies of scale in the rating industry, one would only need to consider an environment where investors have to carry out independent research to rate issuers and their financial obligations. This effort will be immense and would need to be repeated over time. Alternatively, CRAs have the dedicated expertise to generate the same information once and for all with the superior economies of scale in information production at their disposal (Grundmann and Kerber, 2001) and investors do not have to pay for this service. Beyond corporate and structured ratings, the contracting of credit and risk assessment to specialists has proven popular as companies look for efficiency in monitoring the probability of default and, even when investors undertake independent research, the opinions of CRAs are still considered (Ellis, 1998). Section 2.5 continues with a more in-depth appraisal of economies of scale in the rating industry.

## **2.5 Economies of Scale**

Ultimately, it is factors such as access to information or databases that separate the big agencies from the new ones and it is in this gap that economies of scale exist. There is also a fundamental economies of information needed in the initial rating phase because an agency that is bigger in size and market presence has more sway and revenue to access and justify its expenditure on manpower and other resources to produce ratings more resourcefully than a smaller agency. Indeed, information economies are needed for better information search, analysis, dissemination and monitoring (Kumar *et al.*, 1997). Beyond this, issuers and investors have an appreciation for size when reputation and risk diversification are to be demonstrated in a rating.

By and large, economies of scale confer market power to the Big Three in the enduring oligopoly. Hence, it is the consequence of this oligopoly, especially as it relates to the quality of ratings, that the State is concerned about (Dittrich, 2007). Mathis *et al.* (2009) affirm that it is possible for CRAs in an oligopoly to become complacent and unconcerned about protecting their reputations in the quality of their ratings. Equally, Partnoy (1999) holds the view that CRAs had sufficient incentives to compete in the first six decades of their existence because they had to build their reputational capital with the investment community. Therefore, during that period, inaccurate ratings were produced at great peril as competition in the market came from the need to protect reputation. However, it is not clear whether the same incentives still suffice.

Furthermore, to discuss the effect of economies of scale in the ratings market, White (2010:7) maintains that 'the credit rating industry was never going to be a commodity business with hundreds of small-scale producers. The market for bond information is one where potential barriers to entry like economies of scale, the advantages of experience and brand name reputation are important features'. These factors further support the assertion by Dittrich (2007) that the industry is a natural oligopoly at best because, according to White (2007), economies of scale and the imperative of reputation in ratings mean that the market can only accommodate a small number of CRAs. 'To be sure, bond rating was never going to become an atomistically competitive industry' White (2007: 50) further explained. Moreover, Hill (2004) contends that economies of scale is a natural barrier to the rating industry because the market cannot accommodate many general purpose CRAs. Therefore, only CRAs that continuously fulfil the purpose of the market

survive and dominate over time. In describing the triggers for economies of scale, Schwarcz (2002) noted that economies of scale in the traditional sense will exist if only large scale entries are possible or if potential competitors suffer disadvantages when they attempt small scale entries. It appears to be the latter in the rating industry because new CRAs are deprived of rating top-end debt instruments that will boost their reputational capital and revenue. In addition, Hill (2004) comments that economies of scale create problems for legislators because it cannot be controlled by the creation of new regulations for competition. It is obvious that the Big Three have superior economies of scale over new CRAs and therefore, what may concern the State is if existing policies drive these advantages to the disadvantage of new CRAs as the Big Three incur lower average costs per rating produced due to rating-based regulations.

In a broader context, economies of scale are either internal or external. According to Hussein (2010:149), 'internal economies are those which are open to a single factory or a single firm independently of the action of other firms. They result from an increase in the scale of output of the firm and cannot be achieved unless output increases. They are not the result of inventions of any kind but are due to the use of known methods of production which a small firm does not find worthwhile'. Thus, it could be said that the Big Three have internal economies of scale because assign over 95% of ratings in the market.

On the other hand, Hussain (2010:152) also states that 'external economies of scale are those which are shared in by a number of firms or industries when the scale of production in any industry or group of industries increases. They are not



monopolised by a single firm when it grows in size but are conferred on it when some other firms grow larger'. With the development of new financial products in the late 20<sup>th</sup> and early 21<sup>st</sup> century, the collective production of ratings by the Big Three grew exponentially but this was all dependent on the parallel growth of corporate and investment banks worldwide (Galbraith, 2014). Hansel and Krahnen (2007) report that the global market for credit default swaps (CDS) reached €3 trillion while the market for collateralised debt obligations (CDOs) topped €220 billion in 2002. European institutions held a 30% share in both markets and every new issue needed the professional evaluation of CRAs (ibid). Therefore, CRAs' external economies of scale stemmed from the wider financial services sector when corporate and investment banks increased the range and volume of their products.

To grasp fully the uniqueness of the rating industry, it is essential to understand the inherent forms of internal and external economies of scale and how they function within CRAs. It would also seem that in the rating industry no clear distinction can be made between internal and external economies because the big CRAs combine into an oligopoly. Hussain (2010) classifies internal economies into real economies and financial economies. Real economies are advantages that arise from machinery, physical input, labour and raw materials, while financial economies are benefits accruing from access to credit facilities such as better interest rates. The kinds of financial economies of scale are managerial, technical, marketing and risk bearing capacities that the firm controls. On the other hand, external economies arising from the entire industry growing in size could be related to the economies of communication, training/education and of commercial services.

## **2.6 Diseconomies of Scale**

While emphasis has been placed on the economies of scale of the Big Three, their influence in the market as it affects competition and the quality of ratings can well be linked with adverse internal and external diseconomies of scale (Dittrich, 2007). As CRAs grow in size their average costs may rise with the amount of ratings produced. Indeed, a percentage increase in all CRAs' factors of production could produce a negative percentage increase in the quality of rating outputs. Problems of resource allocation and inefficient decision making systems within the organisation can inform such diseconomies of scale as explained by Dittrich (2007) when he argues that at the heart of diseconomies of scale in CRAs lies the possibility of fraud or criminal negligence. In this vein, in 2010, congressional investigations in the US revealed collusion between underwriters and rating analysts. In one instance, when a rating analyst questioned an underwriter over the particulars of an impending debt issue the answer was 'IBG-YBG' (US Senate, 2010:1), which meant 'I'll be gone and you'll be gone' (Mullard, 2012: 91). The underwriter was suggesting that there was no point in undertaking a thorough risk analysis when both parties were in a lucrative position and would have moved on before their misconduct was uncovered (US Senate, 2010). This could be a direct indication of fraud but also an indication of diseconomies of scale as suggested by Dittrich (2007). Similarly, other examples of misconduct and diseconomies of scale abound: in the first quarter of 2007, UBS requested Moody's and S&P to rate a CDO named Vertical ABS CDO 2007-1. When UBS failed to cooperate with analysts, an S&P analyst emailed colleagues saying: 'don't see why we have to tolerate lack of cooperation. Deal's likely not to perform.' In spite of this, Moody's and S&P assigned AAA ratings to Vertical ABS CDO 2007-1 in April of 2007 and

downgraded it in October before it entered junk status in the same year (US Senate, 2010:1).

Going by the evidence above, issuers tended to seek cooperation with analysts to obtain the ratings they desired and whistle blowing had no effect on eventual ratings. In another occurrence, evidence presented before the US Senate in 2010 suggested that issuers were involved in assigning ratings and had inside knowledge about what securities would be downgraded, the timing of the downgrade and the headlines to be broadcast by the media (Cohan, 2011). For example, an email thread between Goldman Sachs' employees read: 'Moody's downgraded \$32 billion of 2006 AA, A, BBB and BBB- bonds today. This will eventually filter into downgrades in CDOs. ABX single-As sold off by a point after the news' (ibid:565). This was an advantage over investors to profit from arbitrage in the market and also further evidence of diseconomies of scale being triggered by the conduct of agents in the rating process.

The views on economies of scale in CRAs are few and narrow with only Dittrich (2007) providing relative depth. In the mainstream, scholars simply recognise economies of scale as a barrier to entry with little or no further analysis on the dimensions of its occurrence in the rating industry. Yet, as far as quality ratings are concerned, it would seem that it is not purely economies of scale but mostly diseconomies of scale that would concern the State in the regulation of CRAs. Underhand practices, misconduct and collusion between issuers, underwriters and

analysts of debt securities impede the State's effort to sustain financial stability through quality ratings.

Conversely, the examples of misconduct cited in this section suggest a shared history of negligence at Moody's and S&P at least. The reaction in the US and in Europe has been increased regulation to ensure that gross misconduct is minimised (Darbellay, 2013). Yet, Dittrich (2007) asserts that fraud by individuals within CRAs is a threat that cannot be predicted but, by the same token, the State cannot accommodate a large-scale loss of trust in the financial market in the maintenance of financial stability. Hence, creating the conditions for reputable CRAs to thrive is the best measure to attenuate potential agency failures and to expand economies of scale that stem from having reputational capital in the rating industry.

## **2.7 Rating Quality**

On the whole, there is no common understanding on the meaning of rating quality even though regulators and commentators use the term freely. Duff and Einig (2009) reference DeAngelo (1981) whose definition of quality focused on the double elements of competence and independence of the auditor. By competence, an auditor will have the ability to identify breaches in the accounts of a company. By independence, auditors will have the freedom to report any breaches identified in a company's accounts. Hence, Duff and Einig (2009) reasoned that this definition of quality could be applied to credit ratings when competence refers to CRAs' ability to accurately assess probabilities of default risk and when independence represents

CRAs' willingness to produce ratings that are lower than the expectations of issuers.

Indeed, competence and independence are not new to the discussion on CRAs and they only infer a different context. In the first instance, extant literature defines a competent CRA as one possessing thorough methodologies to produce rating scores that can be maintained over time (Langohr and Langohr, 2010; Andenas and Chiu, 2013). In the second instance, an independent CRA will not be biased in favour of the financial incentives that it might lose in determining accurate ratings (Mattarocci, 2013). Furthermore, on independence, Manso (2013:1) affirms that 'rating agencies are supposed to provide an independent opinion on the credit quality of issuers' and Duff and Einig (2009) assert that rating quality includes factors such as professional judgment, communication, transparency and the quality and continuity of rating analysts. By these statements, quality ratings are borne from the ability of rating analysts at CRAs to act on their discretion and to determine ratings without interference or duress from other interested parties.

Overall, it is challenging to obtain a functional definition of rating quality even from regulators and the leading CRAs. The IOSCO code of conduct fundamentals for CRAs does not define the concept of 'quality' although it makes reference to rating accuracy (Rousseau, 2005). In the view of Baker and Mansi (2001), quality is relative to various market participants because issuers consider rating accuracy to be rating scores published by CRAs with the most understanding of a firm or industry, while investors attribute rating accuracy to the most consistent research in respect of the merit of the findings that inform the alphanumeric rating.

In the main it is typical of the literature to interchange 'rating quality' with 'quality rating'. As such, Blume *et al.* (1998) report that previous research studying quality ratings have been divided into three branches: the first branch investigates whether quality ratings measure the appropriate variables in predicting defaults and financial distress. Thus, 'S&P's quality ratings have weak power in predicting what they term 'financial distress' in the subsequent year' [following the issuance of a credit rating] (Blume *et al.*, 1998:1391). The second branch examines the informational effect of CRAs and whether published ratings bring new information to the market. As a result, Blume *et al.*, (1998:1391) 'conclude that ratings do contain information beyond what is publicly available'. Lastly, the third branch explores how CRAs incorporate public information in determining quality ratings. Hence, Blume *et al.*, (1998) stress that publicly available data suffice to predict actual quality ratings with a fair degree of accuracy.

Largely, the description of rating quality that corresponds with the objective of this study is the one given by Becker and Milbourn (2011). They describe rating quality as firstly, the ability of ratings to transmit information to investors and secondly, the ability to classify risks. They explain information transmission as the ability of ratings to predict future defaults accurately while showing a relationship with existing bond prices. They further explain risk classification as rating scales (such as AAA, BBB+, CCC etc.) having a stable meaning over time because of their use in regulations and contracts that demand stable interpretation. This is because any rating inflation within classified rating scales will upset regulations and financial contracts tied to ratings. Like Becker and Milbourn (2011), several other studies also define rating quality on the basis of new information being transmitted to the

market through new ratings (Griffin and Sanvicente, 1982; Holthausen and Leftwich, 1985; Hand *et al.*, 1992).

To draw a relationship between rating quality and competition, Setty and Dodd (2003), for instance, speculate that more competition will improve the accuracy of ratings because firms will invest more resources in the rating process and this might lead to better ratings for issuers. In opposition, Cantor and Packer (1997) find that new CRAs assign inflated ratings in comparison to Moody's and S&P. Indeed, they believe that new CRAs are driven to attract clients as a matter of priority and are unable to focus on building reputation for the long term. Hence, they offer higher ratings of lower quality that may mislead investors by misrepresenting the level of risks in a debt security.

In a similar vein, following their description of rating quality as the useful information transmission and risk classification, Becker and Milbourn (2011) find that the entry of Fitch into the rating industry coincided with a lower overall quality of ratings as existing issuers received reduced informational content for existing and updated ratings. They add that bond markets are unlike other markets where competition achieves outputs of better quality and uniquely, ratings are better in quality when competition is not too severe. Baker and Mansi (2001) echo the same thoughts when they find that Fitch assign slightly higher ratings than Moody's and S&P and they claim that firms are more likely to receive upgrades when they apply for Fitch ratings. For this reason, Mählmann (2009) motions that increased competition only

improves rating quality in an asymmetric way because new CRAs are contracted by firms dissatisfied with the assessment of incumbent CRAs.

Another approach toward reviewing rating quality is the idea of 'social efficiency'. Ponce (2012) finds that a change from the investor-pay to an issuer-pay model<sup>20</sup> causes a likely degradation in rating quality beyond a socially efficient level. The logic of this argument is that the latter model consents to a conflict of interest as CRAs have an interest in generating core and ancillary business from the issuers they rate. In the former model, however, ratings that perform poorly could reduce demand from investors and so damage the business of CRAs. Accordingly, Ponce (2012) conceives social efficiency as the level at which CRAs' resources are optimally distributed to produce rating scores after taking account of all internal and external costs and benefits. Understandably, the supervision of CRAs' allocation of resources falls within the realm of welfare economics because credit ratings are a public good. Bohm (1987) depicts welfare economics as the identification of socially efficient solutions for problems of resource allocation by reducing a set of alternatives to the best solution after eliminating inferior choices for the most feasible possibility.

Indeed, the association of rating quality to social welfare repeatedly appears in literature. Dittrich (2007) affirms that the State's interest in rating quality is to design a system that maximises social welfare. Pagano and Volpin (2010:27) maintain the same position by asserting that when issuers choose to release minimal information to the public, they opt for too little transparency from a welfare perspective and 'this

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<sup>20</sup> The transition from the investor-pay to the issuer-pay model has been explained in section 2.3.



opacity results in rating coarseness which in turn facilitates rating inflation'. In contrast, Kurlat and Veldkamp (2013) take the view that the provision of information does not necessarily lead to a higher social welfare because of the structure of the market. They affirm that high-risk issues can benefit from being pooled with low-risk issues, thus allowing both low and high risk issuers to access capital at lower costs.

Moreover, Dittrich (2007) argues that social welfare is impacted by a reduction in rating quality. He contends that to increase market power, CRAs have an incentive to reduce rating quality in order to save costs. This represents a less than optimal distribution of resources to achieve social efficiency and welfare. For Dittrich (2007), the only reason for CRAs to lower rating quality is to save costs but what kind of costs? The obvious forms of cost for CRAs are financial and reputational<sup>21</sup> and while the reputational trade-off is insignificant for the dominant CRAs if they incur lower administrative costs, issuers find themselves in a dilemma as initial cost savings could be lost on issues that underwhelm the market; this leads to significant reputational and financial losses (Hill, 2012).

Ultimately, the characteristics of quality ratings are that they are determined by the inclusion of all information that affect or may affect the likelihood of timely payment going forward (Galil, 2003). However, there is consensus in the assessments of Mathis *et al.* (2009) and Partnoy (1999) that the quality of ratings has suffered a decline with the persisting oligopoly and the passage of time in which the reputation of CRAs reached an optimum level. To cite an example from the CMBS market,

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<sup>21</sup> Reputational Capital is discussed in section 2.10 of this thesis.

Darbellay (2013) states that the quality of ratings depends on the expectations of investors because if investors expect quality ratings then there is good competitive pressure to create the right incentives in the market. On the other hand, if investors expect investment grade ratings for debt obligations then there is a negative competitive pressure that leads to the inflated creditworthiness observed by Günter and Xia (2012). Then, the question that arises is how the Big Three can manage the expectations of investors against the duty of analytical diligence in the rating process. This could be the gap where the alleged collusion between CRAs and underwriters exists.

While importance has been placed on promoting transparency and reducing conflicts of interests in CRAs, Hunt (2008) argues that these efforts are fundamentally incomplete if they do not suggest a well-functioning mechanism that produces an optimum rating quality. In this regard, the continuous correctness of ratings is a major concern and of interest to the State because it relies on it as a de facto consumer (Dittrich, 2007). The International Organisation of Securities Commissions (IOSCO)<sup>22</sup> recognises that the lack of competition in the rating industry deprives the market of opportunities to create an effective control mechanism over ratings quality (IOSCO, 2008). Baker and Mansi (2001) contemplate that while CRAs have done a relatively good job in assessing credit risks, it is the default probabilities associated with alphanumeric ratings that have drifted over time especially during the adverse downgrades of banks between 2008 and 2012 (Karimu, 2016). Relatedly, Allen and Babus (2008) believe that these

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<sup>22</sup> Headquartered in Madrid, the IOSCO is an international organisation that regulates the activities of securities markets in over 100 countries (IOSCO, 2004)

drifts have been caused by an increasingly complex and interlinked system of institutions with multiparty claims to a security that make it difficult for CRAs to assess actual rating quality. In addition to financial regulation, the State is also interested in high rating quality to uphold market efficiency<sup>23</sup>. As such, Rousseau (2005) encourages CRAs to invest concerted effort toward the provision of high quality ratings because market participants recognise quality and are willing to pay for it. This is also because low rating quality could distort the allocation of capital (Dittrich, 2007).

To summarise this discourse on rating quality, the issues that seem important to the State are market and informational efficiency, capital allocation and liquidity as well as stability in risk classification. The State's systemic interest actually rests in the social welfare that ratings provide.

## **2.8 Network Effect and the Two-Rating Norm**

Network effect is a phenomenon in the rating industry that has developed as more issuers and investors loyally subscribe to the Big Three CRAs in search of rating consistency (Ekins and Calabria, 2012). In the opinion of Mauldin and Tepper (2013:289), 'the network effect describes how the value of a service grows as more people use a network...the more people that use any of these businesses, the harder it is for anyone else to compete with them'. For new market entrants, the network effect poses a serious barrier as market participants aim to use the same ratings as their counterparts and rivals and this leads to an increase in the value of the Big Three's services (Brown, 2010). In Brown's (2010) view, the plethora of

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<sup>23</sup> Market efficiency is the allocation of capital based on reliable as opposed to faulty information signals (Bolton *et al.*, 2012).

investment guidelines and private contracts referencing NRSROs has boosted the network of leading CRAs. She further asserts that marketing to potential investors without NRSRO certification is counterproductive when it is a requirement so embedded in US federal and state laws. Under current conditions there is no limit as to the number of ratings issuers can purchase, yet budgetary constraints mean that issuers do not purchase more than two ratings per issue and so the network effect persists.

Another reason for an exclusive network effect is that the Big Three enjoy first-mover advantages because they entered the market in an era of limited information flow when it was difficult to verify the quality of ratings without their services (Staikouras, 2012). In that era, organisational investment to build reputation was relatively small. However, in the current era of modern information systems and layers of complex disclosure regulations, Dittrich (2007) contends that new entrants must invest heavily in persuading clients that they can offer reliable new information.

Furthermore, there is a claim that the network effect that benefits incumbents stems from a cycle of discrimination against new CRAs in favour of Big Three that possess 'time-honoured track records and established reputations' (Staikouras, 2012:82). The market reacts with doubt to issuers that contract new CRAs and suspects that their underlying motive is to shop for better ratings. Moreover, the network effect is also a lock-in effect because market participants desire a stable and common risk language that the incumbent have already developed and

advanced (Fons, 2008; and Portes, 2008). Correspondingly, there is a cost element that locks issuers into dealing regularly with particular CRAs because it is expensive to switch from one CRA to another (Shy, 2001). This expense threatens issuers' access to capital because investors value ratings by the market reputation of the issuing CRAs and will question the motive of contracting lesser known agencies.

To expand on the subject, Dittrich (2007) acknowledges that network effect is a driver of industry concentration because issuers mostly demand ratings from CRAs that investors desire. Indeed, in their survey Baker and Mansi (2002) find that 90% of institutional investors regard the consistency of ratings as the most important factor in judging rating accuracy and there is a simple explanation for this. When rating scales and methodologies are compatible investors can easily compare ratings and, as more ratings are produced and comparisons are made, the size of the network grows as does the size of the informational value placed in the network. In addition, like all networks, maturity leads to standardisation – hence, Moody's, S&P and Fitch have become the default standard.

On the surface of this, it can be assumed that new entrants will simply adopt the methods and working language of the Big Three to enter the network and become a part of it. However, Dittrich (2007) insists that a state of full compatibility is hard to achieve and two major obstacles make standardisation for new entrants impossible anyway. Firstly, investors are knowledgeable and doubt whether new entrants can match the quality of the incumbents for comparability purposes. Secondly, new entrants find it hard to attract business for categories of bonds that are already

being rated by the incumbents. Therefore, they do not add value to issuers nor investors.

Moving on to the two-rating norm that is associated to the network effect, the effect of networks is such that issuers simultaneously seek ratings from two of the Big Three for the majority of debt issues. Mählmann (2009) writes that the bond market is characterized by a two-rating norm that implicitly requires issuers to disclose ratings from two major CRAs in order to access a broader investor pool. To explain this implicit requirement, Petit (2011) discusses that issuers do not view double ratings as substitutes to one another because, for example, they are in a similar position to hotels and restaurants in their attempt to be referenced in all market guides and directories. Invariably, the two CRAs in the two-rating norm are Moody's and S&P in the majority of cases and although they dominate many segments as a duopoly, closer inspection reveals a state of monopoly as there is no real competition in the two-rating norm (Dittrich, 2007). Thus, Petit (2011:11) refers to this occurrence as the 'partner monopoly' and Hill (2004) states that issuers obtain ratings from Moody's and S&P at the same time and very rarely use third ratings from Fitch unless there is a disagreement between Moody's and S&P.

Furthermore, Cantor and Packer (1997) refer to Moody's and S&P as the mandatory agencies while Fitch takes the place of an optional or third agency. To explain this trend, Mählmann (2009) accounts that Fitch takes an optional position because it provides only solicited ratings. Moody's and S&P on the other hand jointly assign unsolicited ratings. In the long run, unsolicited ratings force the hand

of unwilling issuers to solicit ratings from the incumbents 'in the hope of attaining a higher rating' (Gonis, 2010:15). The fact that Fitch is seldom used as a second or only rating could be because of having more presence in Europe than in the US (Mählmann, 2009). Indeed, Cantor and Packer (1997) view the geographic location of CRAs as an expert advantage that may lead to third ratings. Additionally, the two-rating norm is also down to the fact that Fitch's strength is mostly in the asset-backed security segment of the ratings market (Cantor and packer, 1997).

Yet, to explain the occurrence of the two-rating norm, scholars including Partnoy (1999) and Mählmann (2009) have cited NRSRO certification as the reason for this duopoly. Mählmann (2009a:5) claims that the use of NRSRO ratings is deeply entrenched in debt finance because 'individuals making the day-to-day investment decisions have guidelines, practices and form documents all obliging for the purchase of debt instruments rated by S&P and Moody's from which they do not have reason to deviate. Just as the buyer of debt securities has no obvious incentive to violate the two-rating norm neither does the buyer of the rating - the issuer of the debt securities and its CEO'. By this suggestion, the two-rating norm is not merely an occurrence but also an embedded culture in debt finance.

A further explanation of this norm by Staikouras (2012) is that two-ratings simply meet the expectation of investors who anticipate two opinions from the larger CRAs. Dittrich (2007) concurs that investors anticipate two ratings because they can obtain more information than they would from single ratings. A study conducted by Hsueh and Kidwell (1998) demonstrates that there is also an informational value

for issuers in obtaining second ratings because of a double confirmation effect. They allege that issuers pursue two ratings when they believe it improves their certification in the market to the extent that a debt issuer with two ratings will incur lower borrowing costs than a debt issuer with a single rating. Also, issuers seek two ratings when they are uncertain about the quality of their debt issues. Thus, procuring two ratings increases their chances of higher ratings (ibid).

However, there are risks in obtaining two ratings because the opinions of CRAs could differ and lead to contrasting ratings<sup>24</sup>. Hsueh and Kidwell (1998) note that when ratings are split, investors are likely to treat the second rating as more revealing than the first and this has significance on the demand and supply sides of ratings. When ratings are split investors on the demand side will deem the actual bond quality to be somewhere between the conflicting ratings (Jewell and Livingston, 1998). On the supply side, issuers will be worried about investors valuing the bond at the level of the lower rating because it defeats the purpose of acquiring two ratings. In contrast to Hsueh and Kidwell (1998), Ziebart and Reiter (1992) find, in their study of 189 new industrial bond issues, that the market accepts the higher of two split ratings. Presumably, issuers carry out a cost benefits analysis to ensure that the borrowing cost of debt issues with two ratings that could be split does not exceed the borrowing costs of debt issues with solitary ratings.

In spite of the prevalence of issuers soliciting two ratings, there is an ample amount of third and solitary ratings in the market produced by Fitch. The demand for ratings

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<sup>24</sup> Contrasting or divergent ratings are called 'split ratings'.



is heterogeneous and it is typical for issuers to engage one or indeed all three CRAs (Duff and Einig, 2009). Mählmann (2009) cites that issuers use third ratings to lower interest rates on debt issues. In other words, third ratings impact on bond yields especially when issuers have split ratings or are highly geared. Anecdotal evidence from Jewell and Livingston (1999) suggests that the cost of doing business with Fitch is generally lower than the cost of doing business with Moody's and S&P. Mählmann (2009:1228) assents that 'savings in the derived demand for optional ratings are found to be empirically important determinants of the decision to request Fitch ratings', therefore Fitch has a valuable place in the rating process. Possibly, the biggest reason for the existence of third ratings is the capitalisation requirement enshrined in the Basel II agreement<sup>25</sup> as it enforces the use of ratings for the determination of risk weights for capital charges (Basel Committee on Banking Supervision, 2005). In order to prevent rating shopping, the guidelines in the agreement require financial institutions with two ratings to use the rating with the higher risk weight. Nevertheless, when financial institutions have three or more ratings the [Basel] agreement requires them to use the higher of the two lowest risk weights. Thus, it can be deduced that the two-rating system is random but certain operational factors inside financial institutions, like geographic location and leverage ratio, may necessitate third ratings. Yet, whether two or three ratings are sought, the demand for ratings resides within the oligopolistic network of Moody's, S&P and Fitch, the first two being the preferred duo and altogether the trio that investors recognise and trust. On their part, issuers respond by keeping faith with the CRAs that investors have confidence in.

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<sup>25</sup> The Basel II agreement is a pact of the Bank of International Settlement ratified in June 2004 by member states prescribing standards to govern the capital adequacy of internationally active banks.

In referring to Moody's and S&P as mandatory agencies while Fitch and others comprise optional agencies, Cantor and Packer (1997) provide an explanation on why firms might seek a third rating. They consider one reason to be the age of issuers in the market that makes them more inclined to procuring third ratings over time. Also, issuers with long-term outstanding debt are prone to obtaining third ratings to reduce interest rates on current and new debt issues. Lastly, there is a regulatory incentive for obtaining a third rating when two ratings fall below specified regulatory thresholds. The possibility of a third rating gives issuers a chance to pass such regulatory tests. Finally, Gonis *et al.* (2012) assert that the decision to obtain a third rating is informed by firms' leverage and profitability coverage where the former encompasses the level of firms' statutory capital and assets and the latter comprises firms' net income and total assets.

## **2.9 Rating Pricing**

There are two positions for approaching rating pricing in existing literature. The first position is the price at which investors value a debt issue following a published rating and the second position is the price CRAs charge issuers for rendering services to them.

In the first position, Östlund and Hyleen (2009) affirm that investors use credit ratings to establish the initial pricing of debt issues as well as the interest rates. Partnoy (1999:623) reasons that 'investors infer the actual credit quality of a bond from the credit rating and price the bond accordingly'. In the same way, Boot *et al.* (2006) stress that credit ratings are a focal point and a basis on which rational

investors make pricing decisions. Merton (1974) maintains that the value of any debt issue depends on three variables: the rate of return, the provisions and restrictions [within the debt issue like maturity dates, triggers and call terms] and lastly, the probability of default [i.e. credit rating].

Furthermore, An and Chan (2008) observe the effect of credit ratings on the pricing of Initial Public Offers (IPO). They find that firms with credit ratings are significantly under-priced in comparison to firms without credit ratings during an IPO. In spite of this, credit ratings reduce the constraints faced by firms as it allows them to raise more money than is possible without ratings (Faulkender and Petersen, 2006). The ability to raise more money based on a credit rating is valued in itself, hence An and Chan (2008) hold that the existence of a credit rating merely reduces uncertainty about the value of the firm because even though firms with ratings may have IPOs under-priced, the level of credit rating has no significance on the lower pricing. However, when ratings are split, Cantor *et al.* (1997) report that investors may take the lower of two ratings because by so doing they will have a conservative estimate of debt profitability.

As opposed to the first approach to rating pricing, this study will focus on the second approach: the price CRAs charge issuers for providing services to them. It is this approach that affects competition vis-à-vis the price positions that incumbents and new entrants may take in the market. In the early days the primary revenue streams for CRAs were fees charged to subscribers for rating bulletins. However, in modern times the rating fees paid by issuers form almost an entirety of

CRAs' revenues particularly in the US even as subscription fees remain as revenue stream in other business segments (Byoun and Shin, 2003).

In the main, many scholars associate rating pricing to rating quality and market reputation (Klein and Leffler, 1981; Shapiro, 1983; Allen, 1984; Kranton, 2001). They believe that issuers decide to buy ratings from CRAs on the basis of reputation arising from past quality decisions. Therefore, with this in mind, CRAs fix quality-assuring prices to pacify consumers that are perfectly informed about their past quality decisions and can punish them thereafter if they [CRAs] produce low quality (Kranton, 2003). Particularly, Klein and Leffler (1981) and Shapiro (1983) infer that at a quality-assuring price firms will have enough financial incentive to sustain high quality ratings to protect their reputation. Any reversal in quality will earn profits in one period only and therefore consumers, as disciplinary bodies, will punish cheating firms that sell at a quality lower than the assuring price.

Moreover, Chiang and Masson (1988) make reference to the occurrence of statistical discrimination that both Klein and Leffler (1981) and Shapiro (1983) seem to discount in their theory of quality-assuring prices. Statistical discrimination suggests that the rating quality that consumers can observe is limited to the amount of information available to them. In the absence of full information, consumers can only observe average quality and this gives CRAs less incentive to raise quality levels because they do not receive the full benefit of investing in quality output. Therefore, it is possible for CRAs to set misleading 'quality-assuring prices' without being punished in this overtly unique market structure. The weakness of quality-assuring prices lies fundamentally in the inelasticity of demand in the rating

industry. A change in rating fees [or prices] has no effect on the buying habits of issuers or on the expectations on investors (Dittrich, 2007).

Also, in contrast to Klein and Leffler (1981) and Shapiro (1983), Kranton (2001) debates that when consumer enforced discipline is not sufficient to sustain high quality, the interaction among firms in the industry becomes critical to the attainment of high quality. Similarly, Dittrich (2007) asserts that contact between CRAs and issuers guarantees minimum quality because issuers become conversant with the factors determining published ratings. Hence, Kranton (2001) argues that the key condition for quality is whether a firm can consolidate market share with its prices because when there is a guarantee of a constantly increasing market share, there is also an incentive to produce low quality in the short term to take advantage of demand from a rising number of consumers.

Finally, the nature of rating fees may also be understood by the volume of debt issues. Byoun and Shin (2003) attest that typical rating fees are based on the worth, complexity and life-span of a debt issue. In fact, issuers may pay an annual fee that increases with the size of an issue (Schwarcz, 2001). At the turn of the millennium CRAs charged \$25,000 for debt issues of up to \$500 million and 0.01% for issues exceeding \$500 million (Kliger and Sarig, 2000). The figures changed by 2002 when Moody's charged 0.033% for the first \$500 million of corporate debt with an additional 0.02% for deals worth more than \$500 million. Moody's minimum fee at the time was \$33,000 and the maximum was \$275,000 (Covitz and Harrison, 2003). Yet, more than a decade later, Ely *et al.* (2013:25) believe that 'CRAs

retained pricing power following the credit crisis despite reduced reputational quality'. By the admission of Moody's (2009) the agency could charge up to \$2,400,000 for a bond issue.

## **2.10 Reputational Capital**

The role of reputation in a self or moderately regulated environment has been valued for many centuries because institutions acquire reputations over time on the bases of reliability, quality and consistency (Levich *et al.*, 2012). When positive behaviours accumulate and other entities begin to hold a firm in high esteem, that firm generates a reserve of goodwill and a supply of reputational capital (Hill, 2012). This goodwill is particularly valuable when networks of firms conduct recurrent business (Partnoy, 1999). In recurrent businesses firms intuitively engage in reputational-bonding (Mann, 1999).

CRAs, by their very existence, are gatekeepers that act as reputational intermediaries (Pinto, 2006). In the first period of operation CRAs built their reputations only by offering quality ratings from the 1920s to the 1930s. The rating market at the time was a competitive one with low barriers to entry and little margins for qualitative errors. Their business names and operational integrity was subject to punitive scrutiny by the investment community (Basu, 2013). CRAs could only gain market share through hard earned reputations.

Thus, over time, the market share of the Big Three has been linked with the superior status that they have attained over new CRAs in what has been termed 'reputational capital' or the working of the 'reputational mechanism'. As Partnoy

(1999) stipulates, CRAs are in a reputation-driven business. In the same vein, Dittrich (2007:7) claims that the reputational mechanism 'lies at the heart of the credit rating business model' and one of their functions is to provide a 'reputational-bond' between investors, issuers and regulators. The CRAs themselves claim that reputation is more important than revenue. In this regard, a former Vice President at Moody's once declared that 'what's driving us is primarily the issue of preserving our track record, that's our bread and butter' (Becker and Milbourn, 2011:497). By these indications, a strong reputation can be seen as a threshold resource in the rating industry.

Consistent with these views, Megginson and Weiss (1991) deduce that CRAs have their reputational capital at stake when providing certifications through ratings. They assert that any misjudgements in assigned ratings will lead to losses for CRAs and suggest a reputational capital view of CRAs with three assumptions. Firstly, credit rating agencies have reputational capital at stake in issuing ratings. Secondly, rating agencies would lose more in reputational capital from giving false ratings than they would gain in increased fees. Thirdly, ratings are costly and since they contain valuable information they are needed to overcome information asymmetry between issuers and investors. In effect, Megginson and Weiss (1991) opine that CRAs are incentivised to provide accurate ratings for the fear of losing reputational capital. In the same way, Partnoy (1999) and Sinclair (2000) are of the same view and think that false ratings are judgments that do not risk CRAs' balance sheet as such but they do risk their credibility.

Yet, there is disagreement with the preceding assumption because, especially in times of economic turmoil, there is diminishing trust in market indicators like ratings (Boot *et al.*, 2006). Indeed, Rom (2009) finds that the assumptions are contrary to observations in the financial crisis of 2008 when CRAs retained a healthy degree of reputational capital in spite of producing false ratings. Petit (2011:10) concurs and states that a 'CRA's inability to provide accuracy in its forecasts and the ensuing reputational damage it causes among investors does not translate into lower sales to issuers. This is because of an absent competition from actual or potential competitors as issuers have nowhere to divert rating orders'. In other words, the oligopolistic market structure preserves the reputation of the incumbents, notwithstanding the quality of their ratings.

Thus, there is a view by Rom (2009) that the market sustenance of the Big Three stems from the key role that they play as opposed to their reputation. To expound on this view, Rom (2009) assesses that the reputation of the Big Three held strong in the corporate and sovereign debt segments but not in the structured finance sector as the financial crisis developed even though they still had an important function to play in the capital market. Mathis *et al.* (2009) are of the same mind and affirm that CRAs bear strong responsibility for contributing to the financial crisis of late 2008 by knowingly being too lax in their ratings for sensitive classes of structured products. Unsurprisingly, CRAs have responded to this allegation by reporting that it would have been dangerous for them to knowingly provide lax ratings as this would adversely effects their reputation (*ibid*).



The question that arises from the above is whether reputation produces any disciplining effect (Becker and Milbourn, 2011). Mathis *et al.* (2009) study whether the fear of reputational loss deters CRAs from issuing poor ratings by analysing whether CRAs inappropriately rated debt issues while their underlying assets depreciated. They examined published ratings by the Big Three for RMBS issues over an 8-year period based on the premise that evidence of lax ratings will emerge from rating deviations. Their results show that the fear of reputation loss manifests only when a large proportion of CRAs' income is generated from non-complex financial products. For this reason, Dittrich (2007) suggests that CRAs need to build up new reputation for additional activities when they diversify their output.

Similar to Mathis *et al.* (2009), there is a belief that CRAs lack any constraints when they rate structured products (Darbellay, 2013). An S&P employee is quoted to have said: 'we rate every deal, it could be structured by cows and we would rate it' (Darbellay 2013:126). Thus, CRAs may find that it is worth taking reputational risks if the future of the market is uncertain for all players. The findings of Mathis *et al.* (2009) and the views of Darbellay (2013) are a reminder that the performance of CRAs can only be judged ex-post by comparing issued ratings with default ratings. By the same token, Shapiro (1983) contends that the quality of a CRAs' rating can only be assessed over the lifespan of the underlying assets that informed the rating. Perceptibly, the CRAs with the highest correlation between ratings and defaults will accumulate reputational capital, while those with a low correlation with defaults will forfeit reputational capital. Moody's and S&P are aptly aware of this and habitually produce correlation reports to prove the performance of their ratings (Smith and Winch, 2011). However, the process of soliciting ratings occurs ex-ante and

therefore the market's use of ratings is based on existing and not future reputation. Reputation is also the quality expected by issuers in the ex-ante period (Dittrich, 2007). Shapiro (1983) writes that the ex-ante period of investing in their reputations, CRAs find themselves in a position to earn premiums in an ex-post period.

By and large, the manner in which CRAs build and maintain their reputation is greatly influenced by the nature of competition that they face. Becker and Milbourn (2011) observe that competition weakens the effectiveness of the reputational mechanism for two reasons. Firstly, they contend that reputations have value only when future rent<sup>26</sup> is guaranteed and competition reduces this rent and thus, the incentive to maintain reputation is minimised by competition. Secondly, with high elasticity of demand in the rating market, CRAs may reduce their prices or quality to attract and retain clients and this eliminates the value of maintaining reputation in preference for short-term rents.

A conclusion that could be made is that competition may help the preservation of reputation since in the absence of it there is lower incentive to provide high quality services. Hörner (2002:657) claims that the maintenance of reputation within a competitive environment is 'sometimes hard for the individual but it is best for the race because it ensures the survival of the fittest'. Nevertheless, healthy competition does not solve the problem of abused reputational capital but it can be a condition to reverse it. In addition to healthy competition, the pressure from

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<sup>26</sup> Rent refers to economic rents which are 'incomes not requiring any effort or real costs...accruing from passive ownership' and 'not from an active involvement by effort and investment' (Duff, 2010:157).

investors and good policy implementation can support the working of the reputational mechanism.

### **2.11 Mergers and Antitrust Behaviour**

According to Dabbah (2010) a merger occurs through amalgamation, the gaining of operational control or the establishment of joint ventures. Some of the reasons why firms merge include the drive to become more efficient, to consolidate market position and to leverage competencies and external resources (Haberberg and Rieple, 2008). Correspondingly, Walter (2004) describes mergers as strategic alliances and enlists the search for financial efficiency as one of the value gains. In a similar vein, Graham and Harvey (2001) attest that companies with financial flexibility engage in expansion through acquisitions as they invest for growth.

The literature on credit rating and mergers encompasses studies on how credit quality influences merger agreements and the preferred payment methods when rated firms acquire other firms<sup>27</sup> (Karampatsas *et al.*, 2012). However, the current study and review concerns itself with mergers as they relate to competition and new entrants in the credit rating industry.

To begin with, the 'Big Three' expression is deep-rooted and synonymous with the rating industry. Nevertheless, the recognition of Fitch in the financial services arena is relatively recent and only transformed a definite duopoly into an oligopoly in the last fifteen years (Alcubilla *et al.*, 2012). Fitch's market recognition has been achieved in no small way by merging with and acquiring smaller and fairly

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<sup>27</sup>Firms with high credit ratings are more likely to finance takeovers by cash payments.

recognised agencies. In 1997 it merged with IBCA and in 2000 it absorbed Duff and Phelps and Thomson Financial BankWatch, all of which had some degree of market recognition and client base (Fight, 2001). The merger with IBCA proved to be a masterstroke as it enabled Fitch to gain a firm foothold in the European market. Dittrich (2007:96) asserts that the case of Fitch shows that it is possible to gain recognition in the market by using the strength of a conglomerate to operate under a prominent brand name; this recognition 'results from the combination of the different reputations in special segments'. Moody's and S&P have also embarked on serial mergers and acquisitions to extend their geographical spread (Petit, 2011).

Clearly, there has been a strategic drive by leading CRAs to target budding CRAs or providers of risk management solutions to reinforce their market positions especially overseas but these alliances may have anticompetitive and antitrust effects when they reduce the number of industry players. As such, Darbellay (2013) suggests that regulators have a role to play in enacting competition laws and the deployment of competition policies whilst recognising the distinction between laws and policies. Indeed, laws are set legal frameworks while policies are procedures that affirm competition laws (ibid). Dabbah (2010) asserts that the pillars of enacting competition laws should be the moderation of anticompetitive agreements, curtailing the abuse of a dominant market position and the control of mergers as explained below.

Firstly, by the moderation of anticompetitive agreements, Dabbah (2010) insinuates the horizontal brokering of deals between firms in the form of price-fixing, market

sharing and possible restriction of output. Secondly, in possessing market control, the abuse of a dominant market position can arise when firms use their supremacy to act in unilateral ways that affect the competition (ibid). Lastly, the control of mergers focuses on the prevention of concentration in the first place so that amalgamations do not limit new entrants (ibid). Dabbah (2010) concludes that a combination of competition laws and competition policies are necessary to temper market power in specific sectors. In the same way, Darbellay (2013) believes that the credit rating industry is one such special sector where competition laws and policies need to be sanctioned in light of CRAs' role as a quasi-regulator.

Furthermore, as quasi-regulators, Petit (2011: 594) believes that 'CRAs exhibit prima facie features of significant market power (SMP), which is the main target of antitrust policy'. Hence, 'firms holding SMP can profitably set prices at levels that significantly exceed costs' (ibid). The danger of SMP is that it threatens 'economic welfare and in particular consumer<sup>28</sup> welfare' (ibid). With economic welfare at stake, due to SMP, Petit (2011: 607) laments that 'stakeholders have been remarkably coy when it comes to antitrust intervention' and 'very few competition-related remedies have been discussed' in relation to 'the comparative merits of competition enforcement' (ibid:608). As 'antitrust law only bites in the presence of an additional behavioural element' (ibid: 612), it could be said, at the least, that the absence of antitrust intervention in the rating industry is due to the lack of hard evidence of anticompetitive behaviour.

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<sup>28</sup> Consumers in the case of the rating process are of course the investors.

Therefore, in Europe, the provisions of the Treaty on the Functioning of the EU (TFEU) outline two types of anticompetitive behaviours that can activate antitrust intervention. Firstly, article 101 of the TFEU bars any form of collusion among independent players. Secondly, article 102 of the TFEU proscribes any abusive conduct by the dominant players (Chalmers *et al.*, 2014). Thus, 'a prerequisite for antitrust intervention in the credit rating industry is the existence of a course of conduct which fulfils the conditions of application of article 101 or 102 of TFEU' (Petit, 2011:613). However, it is 'extremely difficult to review the various activities of CRAs that may be tantamount to competition law offence' (ibid). In other words, antitrust intervention can only be initiated when antitrust liability has been proven by hard evidence of market limiting practices by incumbents.

Notwithstanding, articles 101 and 102 offer scope to challenge the assertion of Dittrich (2007:138) that 'one has to accept that the credit rating industry is framed by exceptionally strong forces hindering competition' because 'it is natural oligopoly at best' (ibid). Mergers with antitrust concerns may not constitute natural or exceptional forces as White (2010) affirms that mergers among new entrants have caused the rating industry to revert to the status quo of three key players as was the case before NRSRO legislation in 1975.

## **2.12 Notching, Tying and Unsolicited Rating**

Following on from section 2.11 and the assertion by Petit (2011) that antitrust intervention may only be triggered when an antitrust conduct is proven, it has been presumed that notching, tying and unsolicited ratings may comprise the elusive antitrust liability. As analysts, scholars and regulators perceive that SMP creates

the potential for anticompetitive behaviour to thrive, they have specified notching, tying and unsolicited rating to be anticompetitive behaviours advanced by the Big Three (Viscusi, 2000; United States Congress, 2009; Dittrich, 2007; Hunt, 2009; Petit, 2011). In particular, following allegations reported by smaller rating agencies, the US congress referred to notching as an abuse of market power because it drives the concentration of a few firms and undermines the efficiency of the market for ratings.

What then is notching? It is 'a predetermined methodology to discount the ratings of other CRAs on the basis of the type of structured products and rating category' (Staikouras 2012: 92). Similarly, notching could also be 'the differentiation of issues in relation to the issuer's fundamental creditworthiness' (Dittrich 2007:113). Similar to the aforementioned, Galil (2003:30) states that notching is when the 'issuer's rating is different from the issue's rating' taking into consideration the varying degrees of confidence and probability of recovery in the event of default.

In addition, Rousseau (2005:27) argues that 'notching is not a practice that is problematic per se...however in the US several market participants, including Fitch, argue that Moody's and S&P can employ notching to prevent it [Fitch] from rating in certain structured finance markets'. The SEC's view of notching as a 'predetermined methodology to discount the ratings of other CRAs' validates the concerns raised by Fitch, and also by DBRS, against Moody's and S&P. They flag that notching is an abusive practice as Moody's and S&P downgrade and/or refuse to rate certain bonds except if/when they rate the majority of the bonds within the same asset portfolio (Setty and Dodd, 2003). Similarly, Elkhoury (2008:7) reports that Fitch and EJRB have accused Moody's and S&P of initiating an automatic

downgrade of structured securities that they have not been hired to rate. As such, Rousseau (2005) alleges that the practice of notching arises when CRAs debase new ratings on the ratings assigned to underlying assets by other CRAs.

Furthermore, there is a certain relationship between notching and the issuance of unsolicited rating that is rooted in the defence presented by Moody's and S&P. Both agencies argue that it is normal for unsolicited ratings to be notched or rated lower than solicited ratings because of the shortage of information gathered in the rating process (Setty and Dodd, 2003). This is because it is typical for issuers to present assets with counterpart ratings in the rating process. On whether the issuance of unsolicited ratings that suggest notching should be banned, Staikouras (2012) cautions that it would be a drastic solution to ban notching and still require CRAs to rely on counterpart ratings in the rating process. There is also a contention by Dittrich (2007) that any active restriction on notching will constitute the State's direct interference in the rating methodology and process. Down the line, this may create an imbalance in the deployment of methodologies that makes the industry less independent. Hence, the EU has promptly instituted article 8 of Regulation 1060/2009<sup>29</sup> to insure against this threat. The article prohibits CRAs from refusing to issue ratings on a bond because of the existence of counterpart ratings. To ensure compliance, the same article requires CRAs to disclose all instances when they reject the rating scores provided by other CRAs for underlying assets along with an explanation for doing so.

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<sup>29</sup> Article 8 of EU Regulation 1060/2009 legislates for transparency and rigour in the methodologies, models and key rating assumptions in the rating process.



More to the point, in the presence of arbitrary upgrades and downgrades, it is difficult to doubt the legitimacy of allegations that notching constitutes an anticompetitive practice. Rousseau (2005) intimates that a study conducted by the National Economic Research Associates (NERA) aimed at identifying notching practices in the industry proved to be inconclusive. Thus, Dittrich (2007) reveals that the NERA study was commissioned by Moody's in 2003 while a prior study sponsored by Fitch in 2002 also ended indeterminate. The two studies referred to by Dittrich (2007) are Greenberg Quinlan Rosner (GQR) Research (2002) and Carron *et al.* (2003).

Undoubtedly, both studies lacked independence and seemingly reaffirmed the corporate position and sentiments of Fitch and Moody's as their sponsors. In 2002, Fitch affirmed that notching behaviours exhibited by Moody's and S&P were opposed to by leading financial executives because it wrongly penalised investors and suppressed the competition by so doing (Fitch, 2002). In 2003, Moody's responded to this accusation by funding NERA's parallel study and, predictably, one of its findings was a failure to confirm the presence of notching (Frost, 2006).

Furthermore, a key aspect of the study conducted by Carron *et al.* (2003) is their analysis of historical ratings issued by different agencies to detect institutional notching. They draw attention to the distribution of ratings by degree of subordination which arises from structured securities having two or more tranches within a pool that need to be rated separately. The high value tranches are known

as senior tranches while the lower value tranches are the subordinated tranches<sup>30</sup>. Carron *et al.* (2003) contend that while CRAs are commissioned to rate only one or a few tranches within the pool, it is typical for them to exercise discretion and rate all the tranches. They clarify that the decision to contract different CRAs for different tranches is influenced by cost, CRA specialisation, investor demand and the selection of issuers. They find that in most cases Moody's and S&P rate the senior tranches while Fitch rates the subordinated tranches.

In addition to notching, a second market behaviour that stirs antitrust concerns is a procedure known as tying. By definition, Viscusi *et al.* (2005: 226) describe tying to be 'the practice of a seller conditioning the purchase of one product on the purchase of another product'. Correspondingly, Dittrich (2007) notes that CRAs may condition the sale of ratings on the purchase of certain ancillary services or other ratings. The consequence of this is that issuers are compelled to purchase all ratings from the same CRA. Moreover, 'if CRAs oblige enterprises to purchase additional services or actually force enterprises to do so out of fear for a lowering of the credit rating, also known as tying, this may constitute abuse of a market position' (Coskun 2009:258). If proven, tying actions amount to antitrust as the Credit Rating Reform Act of 2006 prohibits demanding payments for additional services in order to obtain or retain credit ratings (Markham, 2015). According to Ferguson (1965), tying may be practiced through any of the arrangements shown in the table below:

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<sup>30</sup> High value tranches or senior tranches 'carry the lowest risk and hence the lowest possibility for return'. The lower value tranches of the equity tranche 'is the highest risk portion'. Hence, the latter is 'the first position to bear any losses occurring in the underlying asset pool, and receives income only after all the other tranches of the security have been satisfied' (Kyle and Russell, 2012: 2).

**Table 4 Tying Arrangements**

<b>Tying Arrangements</b>	
<b>Practice</b>	<b>Meaning</b>
<b>1. Exclusive Dealing Contracts</b>	Obtaining products from a vendor on the condition that they will not be obtained from other vendors
<b>2. Requirement Contracts</b>	Agreeing to obtain all products from a vendor over a period of time
<b>3. Tying Contracts</b>	Obtaining products from a vendor on the condition that one or more complementary products will be obtained
<b>4. Full-line Forcing</b>	Obtaining products from a vendor on the condition that one or more unrelated products will be obtained even though they are generally not used with the tying good
<b>5. Block Booking</b>	Obtaining products in quantities and volumes specified by vendors

(Ferguson, 1965)

To be sure, the sale of one product conditioned on another has been illegal for over 100 years in the US (Bowman, 1957). In 1912, the US Judge, Chief Justice Edward D. White warned of the dangers of tying thus:

Take a patentee selling a patented engine. He will now have the right by contract to bring under the patent laws all contracts for coal or electrical energy used to afford power to work the machine or even the lubricants employed in its operation. Take a patented carpenter's plane. The power now exists in the patentee by contract to validly confine a carpenter purchasing one of the planes to the use of lumber sawed from trees grown on the land of a particular person...My mind cannot shake off the dread of the vast extension of such practices which must come from the decision of the court now rendered who, I submit, can put a limit upon the extent of monopoly and wrongful restriction which will arise (Stevens, 2013: 282).

A telling point from Justice White's citation above is the danger of a market structure, monopoly or otherwise, being an enabler of market restriction as currently

persists in the credit rating industry. The accusations of possible tying attest that the rating process is susceptible to the forms of tying in table 4 and yet there is no empirical evidence of tying and the subject remains unexplored in credit rating literature.

Furthermore, the most common and most well-researched anticompetitive allegation against CRAs is the issuance of unsolicited ratings that Poon (2003) alludes to as a considerable controversy. CRAs were criticised 'for using unsolicited ratings to induce solicited ratings' so much so that in 1999 the US Department of Justice launched antitrust investigations against Moody's on charges of forcing unsolicited ratings on municipal bond issuers (Byoun and Shin, 2003:4). Historically, the first unsolicited ratings were issued by Moody's in 1991 and not long after S&P and the former IBCA followed suit.

On the global scene, the IOSCO (2003) deems unsolicited ratings to be ratings produced without formally engaging the issuer (IOSCO, 2003). Unsolicited ratings are mainly informed by publicly available financial information on the issuers (Poon, 2003). In consensus, Byoun and Shin (2003) point that for unsolicited ratings, CRAs base their analyses on information in the public domain whereas for solicited ratings they can access confidential data. The explosion of unsolicited ratings can be credited to the big CRAs as Cantor and Packer (1995) point to Moody's as having a publicised policy for delivering unsolicited ratings because of an institutional view that it forestalls rating shopping.

However, unsolicited ratings could also be a competitive strategy to enter foreign markets or expand CRAs' market presence. In the 1990s, Moody's and S&P set targets to generate 30% of their revenues outside the US by the year 2000 and were well on course to meeting this target with 20% international income as at 1998 (Byoun and Shin, 2003). In what can be interpreted as a relentless drive to enter the Japanese market, S&P issued 150 unsolicited ratings in Japan leading up to the year 2000, amounting to 63% of its total ratings publication (Standard and Poor's, 2000). Disappointingly, the 1999 lawsuit between the Department of Justice and Moody's curtailed the further publication of market entry data by CRAs.

Yet, in the markets where entry has been achieved, CRAs have also been accused of cultural bias in making unsolicited credit assessments. For example, the Japanese Centre for International Finance (JCIF) claimed that, in the assignment of credit ratings, the Big Three overlooked corporate governance structures in Japan in favour of Western standards (JCIF, 2000). By comparing ratings provided by Moody's and S&P against those provided by the indigenous agency - Japan Rating and Investment Information [also known as RandI], JCIF established that unsolicited ratings provided by S&P were four notches lower than RandI's solicited ratings. Also, S&P's solicited ratings remained two notches below RandI's solicited ratings (JCIF, 2000). The Bank of International Settlements recognised this contention of bias put forward by JCIF (2000) and asserts that the rating disparity could be due to Moody's and S&P's application of tougher scales in the rating of Japanese firms over US firms because fewer defaults have been observed in Japan than would have been predicted by low ratings (BIS, 2000).

By and large, all accounts uphold a downward bias toward unsolicited ratings but what happens when companies with unsolicited ratings acquire solicited ratings? Güttler *et al.* (2005) studied the stock market reaction to changes from unsolicited to solicited ratings in 62 firms between 1996 and 2004. Their sample required for unsolicited ratings to be different from solicited ratings over the period of study which had 49 upgraded and 13 downgraded firms in the sample. They found that there was a 20.76% appreciation in stock value for the 49 upgrades within 0-90 days of the rating announcement and allude this increase to the disappearance of downward bias once ratings became solicited and invariably higher. The appreciation held even after controlling for regional, temporal and sectoral factors that might have impacted on stock value throughout the eight-year period. This could explain why Gonis *et al.* (2012: 711) attest that ‘firms with solicited ratings boast higher profit margins and higher rates of return on assets when compared with firms with shadow ratings<sup>31</sup>’. On the contrary, Cantor and Packer (1995) affirm that unsolicited ratings can materially affect the yield paid during a debt issue if it is adverse enough to misrepresent the value of the issue in the market.

In summary, what remains to be verified in the literature on CRAs is some evidence of notching and tying. The previous studies conducted by GQR (2002) and Carron *et al.* (2003) were not only inconclusive, they also lacked analytical independence and theoretical underpinning in academic literature. Hence, there is scope to undertake an independent exploration of these two practices to develop the credit rating literature.

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<sup>31</sup> A shadow rating is another name for unsolicited ratings.

## 2.13 Review of Prior Studies on Notching

To the best of the investigator's knowledge, only two studies have examined the occurrence of notching and both exist in the professional literature. Thus, Greenberg Quinlan Rosner Research (GQR) conducted the first study in 2002<sup>32</sup> (Fitch, 2002) while the National Economic Research Associates (NERA) published the second study in 2003<sup>33</sup> (Carron *et al.*, 2003). There is scope to expand on these studies, particularly on the one conducted by NERA in 2003, as Carron *et al.* (2003) report that the results suffer from data limitation. In the research conducted by GQR, 66% of the respondents believed that there is no independent and substantiated research providing evidence of notching. The assessment of the investigator is that research on CRAs have not only sidestepped the persisting issue of notching and fallen short of considering the development of tying, they have also been dependent on funding by CRAs with vested interests. To proceed in the current study, it is necessary to review both prior studies to understand their empirical methods and findings. The review is also vital for purposes of comparison and to define the gap that the current study aims to fill.

Firstly, the Fitch sponsored GQR's study sampled 128 senior executives of structured finance companies using telephone interviews between February and March 2002 and presented their findings using descriptive statistics. The initial shortlist of companies numbered 305 and the products managed by these senior

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<sup>32</sup> The GQR study was commissioned by Fitch. See Fitch (2002). GQR is a Washington-based company that provides opinion research and strategic advice.

<sup>33</sup> The NERA study was commissioned by Moody's Investor Service in 2001. See Carron *et al.* (2003). NERA is a New York based consultancy that provides economic and financial research.

executives included asset-backed securities (ABS), collateralised debt obligations (CDOs), CMBS and RMBS. Thus, GQR (2002:2) posed this notion to their sample:

‘Rating agencies sometimes use a practice called notching when they rate structured finance vehicles, such as CDOs, SIVs and asset backed commercial paper, in which they automatically adjust downward the rating on underlying collateral bonds if their own rating company did not originally rate those bonds. Based on what you know, do you generally approve or generally disapprove of the practice of notching?’

Reportedly, 52% of the senior executives in their sample disapproved of the practice and of the 33% who disapproved, 45% thought that a variance of one notch is sufficient to address underlying credit disparities (GQR, 2002:2). Thus, GQR affirmed that it was 67% of senior executives who were actually opposed to notching because it undermined the competition. However, up to 66% of senior executives also believed that there was no independent data or research to support notching behaviour. In addition, 63% of the executives thought that Moody’s and S&P used notching to maximise market share as opposed to signaling genuine differences in creditworthiness. Furthermore, 91% of the respondents stated that the market would be best served by the three CRAs.

In contrast to the GQR study, the study by Carron *et al.* (2003) relied entirely on panel data that excluded market participants. To begin with, they define notching as the ‘systematic differences, if any, created through the rating processes employed by the major CRAs’ (Carron *et al.*, 2003: iv). Furthermore, they explain notching to be an adjustment to ratings aimed at ‘bringing them in line with ratings it believes it



would have assigned to a collateral' and/or 'adjusting for uncertainty and perceived differences in the various CRAs' monitoring practices' (ibid).

In seeking evidence for notching, Carron *et al.* (2003) collected historical rating information from the Big Three for bonds issued between 1993 and 2001. They then collated a database using these historical ratings and excluded undisclosed, uninsured and non-dollar denominated issues as well as short-term ratings. As part of the data cleansing process, they filtered out previously rated securities that had matured, been called or redeemed. Carron *et al.* (2003) found that Fitch and Moody's issued triple-A ratings 30% of the time, while S&P issued triple-A ratings 40% of the time. The arguably high rate of triple A issues was explained by the high expectation of stakeholders in structured finance. Indeed, they affirmed that AAA ratings were not only the most frequent issues but that the Big Three tended to agree more on AAA issues than on any other rating grade. Specifically on notching, Carron *et al.* (2003)<sup>34</sup> reported that Moody's would downgrade S&P's and Fitch's securities 84% of the time. They put this down to any or a combination of the following reasons: bias in the collateral that sponsors present, divergent rating criteria by CRAs, deviations in monitoring practices and an unrepresentative sample of securities. In another report, it was suggested that Moody's rated CDO tranches five notches lower than other CRAs (Carron *et al.*, 2003)<sup>35</sup>.

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<sup>34</sup> Carron *et al.* (2003) cited from Moody's (2002) 'Moody's Studies Ratings of Non-Moody's-Rated CMBS and Revises Notching Practices'.

<sup>35</sup> Carron *et al.* (2003) cited from Moody's (2002) 'Moody's Studies Ratings of Non-Moody's-Rated CDOs and Confirms Ratings Estimate Approach'.

To offer a précis on the methodology of Carron *et al.* (2003), it relied entirely on historical rating data to explore a notching behaviour that does not necessarily manifest in the quality of ratings but in the intent of rating analysts who actually assign ratings. Their historical data proved effective in providing insights into the distribution, differences and dispersion of ratings, as well as CRA's alignment to rating scales. Thus, this approach fell short of tracing the analytical and human factors that may or may not contribute to notching and also to tying. Seemingly, this shortcoming was due to the exclusion of market participants in their study.

To summarise and to re-affirm, GQR (2002) and Carron *et al.* (2003) are the only prior research directly related to notching. Respectively they explored telephone interviews and historical data to investigate notching, albeit, inconclusively. Yet, the severe scarcity of notching-centric studies inhibits a more robust review on the phenomenon to the extent that it provokes the undertaking of the present study. The ensuing section offers a description of the rating process.

## **2.14 The Rating Process**

The last section of this literature review aims to assess the rating process that is at the heart of this study. The importance of the rating process to competition is underscored by Karimu (2016:332) who writes that 'with very minimal threat to competition, these agencies [the big three] will be more complacent in their methodologies'. Hence, in normal situations, debt issuers initiate the rating process by making requests to CRAs although the CRAs 'do on occasion approach the issuer when they become aware that a major issue is about to be offered for sale'

(Sinclair, 1994: 139). Once a request or contact has been made, a rating analyst, with experience and expertise in the issuer's field, is appointed to lead a team of analysts to carry out the assessment work (Gonis, 2010).

After a team of analysts has been appointed at the CRA, it is typical to proceed with a meeting between the CRA and the issuer's management team. At this meeting, 'three types of information flow into the rating process' (Sinclair, 1994: 129). 'The first type of information is the publicly available kind...this includes quantitative information such as audited financial statements and qualitative information such as media reports on the state of the industry, municipality or country' (ibid). Next, 'the second type is the information disclosed by the issuer themselves. This includes up-to-date financial information on the operating position of the entity but it also includes qualitative information on the accounting policy, management experience and skill, competitive position and corporate strategy' (ibid). Lastly and interestingly, Sinclair (1994:139-140) adds that 'the third type of information is provided by competitors and disgruntled former employees of the issuer. The bond raters claim that this sort of information is uncommon and is treated skeptically but they exhibit no qualms about asking questions of the issuer based on these anonymous tips'. The exchange of this information occurs over a number of meetings between the issuer and the CRA.

Following from the initial meetings, it is typical for CRAs to pose a set of questions to the issuer in need of further clarification (Gonis, 2010). Issuers may respond to these questions in writing or by delivering a presentation over one or a few

meetings with the CRA. It is after these preliminary questions have been answered that the analytical rating process begins and analysts assess the qualitative and quantitative facets of the issuers for a minimum period of time vis-à-vis the business environment and the outlook (Standard and Poor's, 2005; Fitch Ratings, 2006). According to Gonis (2010) this qualitative and quantitative analysis phase comprises the most important stage of the rating process because it is at this juncture that a rating recommendation is made in a draft report that is submitted to a rating committee.

Thus, the rating committee is a group of senior and expert analysts within the CRA with the ultimate responsibility of assigning a definitive credit rating. The rating committee 'discusses the lead analyst's recommendation and the facts supporting that rating' (Gaillard, 2011:37). Then, 'the voting of members of the committee express their views on the recommendation. Each voting member has one vote. Finally, the committee officially assigns a rating' (ibid) and the rating committee adjourns by communicating the assigned rating to the issuer by way of a draft report (Gonis, 2010).

The draft report is only provisional and modifiable if issuers provide new material information that the team of analysts believe may impact on creditworthiness (ibid). There is also a window at this stage for issuers to make an appeal but 'this appeal may not alter the rating committee's decision' (Gaillard, 2011:37). However, 'Fitch and S&P ratings can be appealed prior to their publication but in contrast Moody's ratings cannot be appealed' (ibid). Indeed, the appeal stage is a critical phase

because it is when ‘feathers can be ruffled’ (Fight, 2001:54) and issuers may ‘threaten to cancel the whole process if the credit rating assigned by the agency is not of their liking’ (Gonis, 2010:49). In the event of an appeal process, whether successful or unsuccessful, a rating announcement would follow and it is ‘disseminated to the public via the news media and the agency’s website’ (Gaillard, 2011:37). Figure 1.1 illustrates a standard rating process.

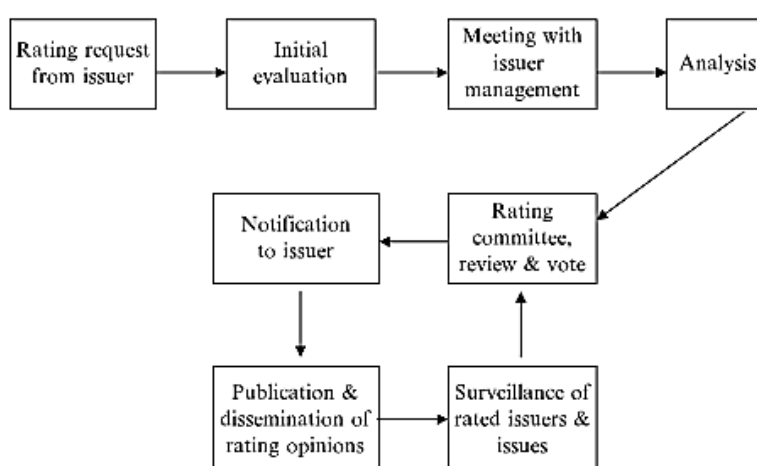


FIGURE 1.1 THE RATING PROCESS

(Gaillard, 2011)

Yet, the rating process does not stop after the rating has been assigned and the public has been informed. Particularly for structured ratings, the rating parties would also commit to offer and be in receipt of continuous review and surveillance on the performance of the underlying assets so as to adjust the rating should the need arise. ‘This is important, because one of the major criticisms of the agencies has been the backward or historical focus of much of their credit analysis’ (Sinclair, 1994:141). CRAs demonstrate this surveillance by making rating changes or reviews, ‘or a listing on Moody’s Watchlist and S&P’s CreditWatch list which signal positive or negative rating implications of events or trends’ (ibid). Finally, it should be added that issuers, especially non-financial issuing institutions, would contract the services of an underwriter [also known as an investment banker] to represent

them and liaise with CRAs on their behalf in the rating process (Alcubilla *et al.*, 2012).

This chapter concludes by developing a theoretical framework to investigate both notching and tying. By designing a system of interaction to accommodate other factors that may also impede new CRAs from entering into the market and thus uphold the oligopoly, the theoretical framework makes an argument about why this study matters and demonstrates a link between the theory and the empirical investigation to be undertaken.

### **2.15 The Theoretical Framework for this Study**

The fundamental purpose of a theoretical framework is to describe a complex system of interactions that underlie a process or a social organisation. Having reviewed the domain of this study and undertaken a literature review, the phenomena to be explored will now be further clarified. By definition, a theoretical framework is a logically structured representation of concepts, variables and relationships involved in a scientific study with the purpose of clearly identifying what will be explored, examined, measured or described (Kenny *et al.*, 1997). Hence, the theoretical framework in this thesis aims to shape the current study by grounding it in the concepts of notching and tying and relating these concepts to the research questions as suggested by Fisher (2010).

Furthermore, a theoretical framework is also a description of core concepts with latent relationships that cause a phenomenon to occur (Kenny *et al.*, 1997). They [theoretical frameworks] are ultimately propositions to be validated and tested by

empirical findings (ibid). In the current study, the theoretical framework has been developed through a structured approach following the literature review and prior to data collection to ascertain if the concepts of notching and tying constitute anticompetitive behaviour and antitrust practices in the credit rating industry. Indeed, designing a theoretical framework using a structured approach of this sort is critical for narrowing the focus of research studies (Fisher, 2010).

Yet, in spite of the importance of theoretical frameworks, Van der Stede (2001:199) contends that there is usually not a strong theoretical precedent for studies published in financial research, hence 'there is a role for new constructs for which there are no ready-made instruments available from other disciplinary areas'. Consequently, the theoretical framework presented here considers the sparse literature to develop a mechanism to explore the anticompetitive influences of notching and tying. The model makes an argument about why this study matters and demonstrates a connection between the literature review and the real rating process and clarifies the areas in which relationships exist between the literature and the practice. On one hand, the literature is essential for making sense of the events being observed in the industry. On the other hand, the practices in the rating process are important as they shed light on phenomena that have gone unnoticed in the literature on CRAs. Accordingly, the theoretical framework proposed in the current study represents an understanding of the literature, the research problem and the underlying concepts and phenomena being studied. Figure 1.2 illustrates this framework:

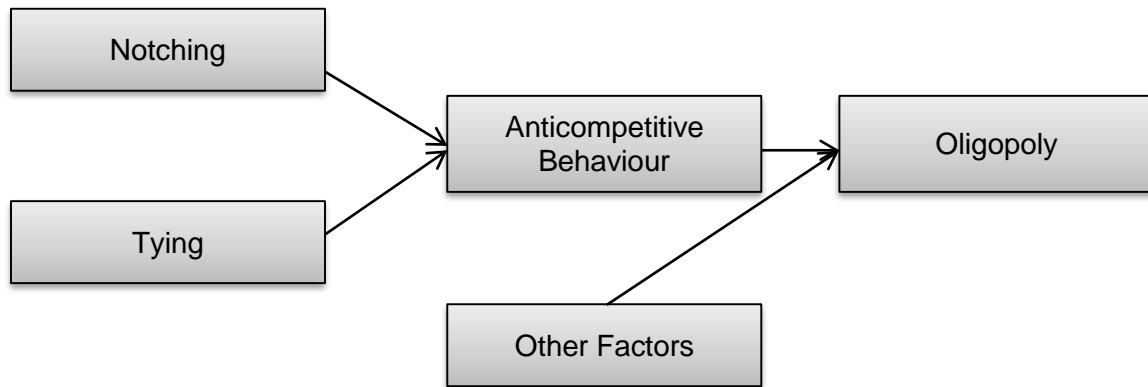


FIGURE 1.2 THEORETICAL FRAMEWORK

Firstly, recalling that the literature suggests that notching and tying are two strategic behaviours by which the Big Three maintain their market position, the theoretical framework therefore presents both behaviours as concepts and as independent variables. Secondly, the literature suggests that the effect of notching and tying on the market structure in the long run is an oligopoly (the dependent variable). However, in the short run both notching and tying influence the motivations of parties in the rating process. These motivations are an intermediate variable that manifest through an anticompetitive behaviour which directly impacts on the dependent variable (Oligopoly). Finally, in keeping an open mind, the theoretical framework also accommodates additional factors in the data that may contribute to the oligopoly or impede new CRAs from entering the market.

Thus, underpinned by the specified theoretical framework, the current study poses several contributions to the academic and professional literature on competition among CRAs. These contributions are:

1. undertaking the first independent empirical study on notching and tying in the credit rating industry,
2. obtaining rare and first-hand empirical data from rating analysts and underwriters on their behaviours in the rating process,
3. offering further evidence on the assumptions made by rating analysts and underwriters in the rating process,



4. providing first hand evidence to policy makers on the interests and strategic actions of analysts and underwriters in the rating process.

On the first contribution, unlike prior studies by GQR (2002) and Carron *et al.* (2003), the present study is not supported by any entities with vested interests in the rating process. Hence, the inherent findings are more likely to be interpreted without bias. Secondly, the present study will interview actual actors in the rating process where other studies have relied on panel data and quantitative estimations to understand the rating process. Alternatively, a direct interface with rating analysts and underwriters is crucial to understanding human influences on the phenomena of notching and tying and on competition in the rating industry as a whole. Thirdly, using interview data, the present study will verify and clarify the decision-making process of agents in the rating process. Lastly, concerning the implications for policy makers, an understanding of the rating process matters because CRAs are routinely expected to operate in a strictly rational manner and rarely in their corporate interests. It is somewhat a reasonable but ultimately unrealistic assumption on the part of policy makers to maintain such expectations because strategic behaviours that manifest through notching and tying could be carefully accounted for in policy making. Indeed, the ultimate challenge for policy makers is how to design a rating industry with strategic participants so that the end result is quality credit ratings produced by a competitive ratings industry.

## **2.16 Conclusion of Literature Review**

This chapter has focused on the factors, barriers and drivers of competition in the credit rating industry as they inform the possible anticompetitive behaviours of CRAs. Drawing out these themes makes it possible to identify the forces supporting

the oligopolistic market structure and the restriction of new entrants. Altogether, economies of scale, network effects, two-rating norm, reputational capital, rating pricing, notching, tying, unsolicited ratings and mergers have been viewed to enable or threaten the market position of big and new CRAs alike as they respond differently to conditions in the industry.

The problems found in reviewing the literature in these areas contribute to the originality of this study. Thus far, the most cited anticompetitive behaviours of CRAs perceived are notching, tying and the issuance of unsolicited ratings. Of these practices, there has been no conclusive empirical evidence of notching and tying (Rousseau, 2005; Viscusi *et al.*, 2005; Dittrich, 2007). On the other hand, unsolicited ratings are rampant and have been well proven in literature. It will be pioneering to empirically investigate market participants to explore the presence of notching and tying practices. Darbellay (2013) already acknowledges that notching is an area where competition policies can play a role. Hence, the novelty of this study hinges on exploring evidence of notching and tying.

The indicators to be studied from the theoretical framework presented are the phenomena of notching, tying and other factors that impede new CRAs from entering the industry. These phenomena are nonconcrete and intangible concepts that can only be indirectly measured by exploring other factors in the rating process. Therefore, the interview questions in the current study will probe rating analysts and underwriters on pertinent factors in the rating process that influence their behaviours and decisions. The next chapter will discuss the methodology of this study, it will compare the various epistemologies and paradigms of inquiry and

review the different research approaches in qualitative research. Subsequently, chapter 5 will adopt a research approach that complements the research questions and the theoretical framework to be examined.

## CHAPTER THREE: METHODOLOGY

### 3.1 Introduction

In chapter two, the concepts, theories and practices around the market structure, market barriers, notching and tying practices were presented with reference to the Big Three. Subsequently, chapter three presented and explained a theoretical framework for investigating the impediments of new CRAs and the phenomena of notching and tying. Hereafter, the current chapter proceeds to explain the methodology used to inquire about anticompetitive practices in the credit rating industry. According to Kumar (2008) a methodology is a strategy to systematically solve a research problem through the selection of relevant methods.

Accordingly, the aim of this study is to understand competition in the credit rating industry by exploring notching and tying practices in the rating process between rating analysts and underwriters during the issuance of debt security. In order to achieve this aim, it is pertinent to outline three key questions to be investigated in this study. They are:

1. What are the impediments of new CRAs in the rating industry?
2. What are the drivers of notching in the rating process?
3. What are the drivers of tying in the rating process?

The issues that inform alleged anticompetitive behaviour in the rating industry are not limited to the above. Yet, for a study to progress, certain key areas of investigation need to be identified (Polit *et al.*, 2001). Therefore, in the first instance this study separately explores the plight of new CRAs in the market and then in the second instance, it investigates how the alleged practices of notching and tying combine to affect competition.

In advance of specifying the methodological approach of the current study, the presence of prior studies on the notching phenomenon is acknowledged in GQR (2002) and Carron *et al.* (2003). However, a limitation of both studies is that they broadly sampled senior executives in structured finance without conditioning for experience in the definitive rating process where notching and tying phenomena potentially occur. Thus, the current study addresses this weakness by exclusively sampling rating analysts and underwriters with first-hand experience of the rating process.

The overarching aim of this chapter is, firstly, to review the possible research paradigms and alternative designs in qualitative research. A review is necessary to rationalise and justify the choice of a research paradigm that informs this study. Secondly, the chapter aims to explore the different research methods that support qualitative research before discussing the choice of thematic analysis in this study. Thirdly, it presents an account of thematic analysis to justify its place as a valid research and analysis method. Finally, by way of discussion, the chapter demonstrates the appropriateness of thematic analysis for handling the inherent research problem.

### **3.2 Paradigms in Qualitative Research**

A paradigm or philosophical assumption is the 'constellation of beliefs, values and techniques shared by members of a scientific community' (Kuhn, 1996:175). A paradigm is also a means of 'examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted'

(Saunders *et al.*, 2012:140). Fundamentally, 'a paradigm is a way of thinking about and conducting research. It is not a methodology but a philosophy that guides how research might be conducted. More importantly, a paradigm determines the types of questions that are legitimate and in what context they will be interpreted' (Gliner *et al.*, 2011:7). Paradigms are particularly important to recognise the research perspectives of a research community on various phenomena in order to establish the best method to investigate their occurrence. Furthermore, Guba and Lincoln (1994:105) assert that paradigms 'guide the investigator not only in choices of methods but in ontologically and epistemologically fundamental ways'. These fundamental ways are important to provide a philosophical structure for the design and conduct of a research process.

Accordingly, several types of research paradigms have been advanced to represent numerous means of investigating and understanding different realities because truth changes over time as reality changes and people have different ideas (McCaslin, 2008). Similarly, Guba and Lincoln (2005) affirm that knowledge is not discovered but constructed and they advance that there are four types of realities and knowledge that differ in philosophical assumptions: positivism, post-positivism, constructivism (or interpretivist) and the participatory (or cooperative) paradigm. Although these paradigms bear similarities they differ significantly in their ontology [reality], epistemology [knowledge] and methodology. These differences are further discussed:

### 3.2.1 Ontology

The term ontology refers to the nature of being and the study of what exists and what the existence of something means. As a discipline, ontology is 'a method of enquiry into philosophical problems about the concepts or facts of existence' (Jacquette, 2014:3). Ontological questions inquire about the form and nature of reality and what can be known about that reality (Guba and Lincoln, 1994). It is now opportune to discuss the ontological differences between the various philosophical paradigms.

Firstly, in the positivist paradigm, the assumed ontology is that reality exists externally and can be completely understood (Jacquette, 2014). By existing externally, the researcher undertaking research with a positivist paradigm is distant from the research subjects and, as a result, positivists observe reality to seek out consistencies or relationships to develop scientific conclusions (Saunders *et al.*, 2012). Fundamentally, positivists believe that scientific methods establish truth and objective reality by measuring reality and breaking them into variables (Chilisa and Preece, 2005).

Secondly, in a post-positivist paradigm, reality is understood with probability and imperfection because researchers are not the objective observers that positivists believe them to be. On the contrary, post-positivists believe that researchers bear biases in observing, analysing and reporting research (Steinert, 2014). In spite of the recognition of human bias, post-positivists retain the positivist ideal that reality is

independent of the researcher and can only be measured objectively (Greene, 2007).

Thirdly, in the paradigm of constructivism, reality is socially constructed and there is no objective truth. The aim of this paradigm is to understand and interpret human thoughts, interactions and discourse and to explain the reason for those actions (Steinert, 2014). Constructivists attempt to show how participants make choices in the social contexts that they interact in (Burton and Bartlett, 2009) and emphasise the role of humans as social actors that interpret meanings through continuous interaction (Saunders *et al.*, 2012). Without concern for objectivity, constructivists co-create meanings with research subjects by mutually interacting with them.

Finally, the ontology of the participative paradigm is that meaning is co-created through the mind and cosmos of the external world which includes objective and subjective realities (Howell, 2012). In participative inquiries, research subjects contribute to the making of hypothesis, the formulation of conclusions and the intervening activities (Nelson and Wright, 1995). In the participative paradigm, research subjects are fulltime co-researchers and the researcher is also a co-subject that participates fully in the action and experience that is being researched (ibid).



### 3.2.2 Epistemology

The term epistemology<sup>36</sup> refers to knowledge and is often called the theory of knowledge (Burton and Bartlett, 2009). Epistemology identifies relationships 'between the knower or would be knower and what can be known' (Guba and Lincoln, 1994:108). Epistemology also focuses on how knowledge is created and what constitutes legitimate knowledge. Thus, the nature of our being [ontology] is linked to how we perceive the creation of knowledge and the preferred means of understanding that knowledge [epistemology] (Burton and Bartlett, 2009). The purpose of epistemology is to lead us towards suitable methods of study and a full understanding of our research process (ibid). Braun and Clarke (2006:14) contend that 'research epistemology guides what you can say about your data and informs how you can theorise meaning'. Nonetheless, the various paradigms of inquiry occupy different epistemological positions and ought to be discussed separately.

Firstly, the epistemology of the positivist paradigm is that knowledge is a statement of fact that can be tested empirically. Thus, results can be empirically 'confirmed, verified or disconfirmed and are stable and can be generalised' (Chilisa and Preece, 2005). For the positivists, knowledge is produced from hard data that is also objective and independent of the researcher. Indeed, the epistemology of positivism lies in the appropriateness of the tools used to gather data and these tools are those borrowed from the natural sciences.

Secondly, the epistemology of post-positivism is that while knowledge can be developed from neutral observation, our understanding of that knowledge might be

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<sup>36</sup> *Epistemology* is derived from the Greek words *episteme* and *logos* which, respectively, mean knowledge and explanation (Ritzer and Ryan, 2010)

mistaken due to certain factors. These factors include the availability of best procedures, evidence and arguments. However, post-positivists also believe that knowledge can be reviewed with the benefit of new critique or evidence (Ritzer and Ryan, 2003). Therefore, Guba and Lincoln (1994:110) believe that the creation of knowledge is a 'regulatory deal' in which findings that are replicated are probably true.

Thirdly, in constructivist epistemology knowledge is both transactional and subjectivist in nature as it is created and developed as social inquiry progresses and meanings and experience are socially produced and reproduced (Burr, 2003; Howell, 2004). In this constructivist or critical theory paradigm, the researcher and the subjects actively participate in knowledge creation and together, their personal values inevitably influence the inquiry (Guba and Lincoln, 2005). Consequently, the emphasis on values has led to the constructivist paradigm being called the value-mediated paradigm (Howell, 2004). This emphasis has also allowed the paradigm to advance the effects of judgments and human interests in knowledge that result from social inquiry (Tribe, 2009).

Finally, the premise of the participatory paradigm is that knowledge is obtained through 'experience and co-creation of findings' (Lincoln and Guba, 2000:168). Experience, according to Heron and Reason (1997:278), is 'subjective knowledge by acquaintance, by meeting and by a feeling of participation in the presence of what is there'. Along with experience, the participatory paradigm creates knowledge through consensus.

### **3.2.3 Methodological Questions**

In social enquiry, 'methodological questions involve questions of purpose, of what one wants to know and why. No methodology can take a photograph of the social process we want to understand'...rather, 'all methods are lenses that influence what we find, as well as what we ask' (Young and Borgen, 1990:230). Thus, to guide the process of research, methodological assumptions determine how one goes about finding out reality that can be known (Guba and Lincoln, 1994).

Conventionally, studies with positivist and post-positivist paradigms adopt quantitative methods to prove or disprove hypotheses through experiments. On the other hand, constructivism and the participatory paradigms require human interactions and constructions that do not require empirical proof (Guba and Lincoln, 1994). Both Creswell (2013) and Howell (2014) hold the view that all paradigms of inquiry lead towards specific methodologies that represent the special circumstances of individual research projects. Effectively, the positivist and post-positivist paradigms are geared towards proving causes and effects, while the constructivist and participatory paradigms are geared towards understanding the environment within which a phenomenon subsists.

### **3.2.4 Constructivist Paradigm in this Study**

The selection of a fitting paradigm for this study was carefully thought-out to ensure its suitability to uncover the phenomena being studied and its relevance to the rating process between rating analysts and underwriters. Therefore, after due comparison of the attributes of various paradigms, this study elected a constructivist

paradigm to gather and analyse data through the shared experiences of rating analysts and underwriters in the rating process for debt security. The constructivist paradigm has gained relevance in the social sciences over time because of the dominant logic among researchers that knowledge and truth evolve from the perspective of participants in a human process (Schwandt, 1998). In light of the outlined objectives of the current study, the socially constructed problems of competition in the rating industry and the elusive phenomena, the constructivist paradigm avails the most complementary concept of reality being truth that resides in the shared experiences of human agents (Howell, 2013).

Yet, there are three variants of constructivism that differ in their conception of truth generated from human interaction. These variants are psychological, radical and social-constructivism (Raskin, 2002; Constantino, 2008). Firstly, psychological constructivism, which is popular in education research, deals with the attitude of a group towards learning and how this affects the process participated in by the group. Secondly, radical constructivism exhibits truth that is created by individuals' understanding of reality regardless of the validity of this reality. Lastly, social-constructivism represents truth that is 'developed over human history as a social construct that does not reflect an objective external world' (Constantino, 2008:118). Therefore, this study goes further to adopt a social-constructivist position to take a critical stance on the studied phenomena as shaped by a rating process with unique meanings, nuances and participants.

### **3.4 Social-Constructivist Paradigm in this Study**

In areas of financial, regulation and corporate governance research, a number of authors have stated that phenomena are socially constructed from the dynamic nature of reality (Letza *et al.*, 2008). Furthermore, the social-constructivist paradigm complements the objectives of this study in the following ways: firstly, data collection in social-constructivism gathers evidence through open-ended questions that sample the meanings that individuals ascribe to a problem or event (Creswell, 2009); secondly, social-constructivism accommodates subjective meanings in data to represent the complex perspectives of research participants (Creswell, 2013); thirdly and lastly, social-constructivism has a focus on processes within institutions rather than on institutions themselves (Burr, 2003).

Thus, by observing actors in the rating process, this study investigates the subjective actions and interactions of rating analysts and underwriters and social-constructivism supports the subjective nature of these interactions as well as the data to be collected from these parties. Methodologically, the adoption of social-constructivism is the objective acknowledgment of subjectivity in research (Howell, 1998). Hence, the adoption of social-constructivism in this study will accommodate the dispositions and conceptions of the study's sample in response to the research questions.

### **3.5 Research Approach**

In qualitative research, social inquiry is limited to either the inductive or the deductive approach as determined by the overarching research paradigm (Fox, 2008). A deductive approach develops from a general or abstract idea about a

social situation while an inductive approach first collects data, analyses it and generates a hypothesis (Strauss and Corbin, 1990). In the main, studies underpinned by positivist and post-positivist paradigms follow a deductive approach while the constructivist and participatory paradigms follow an inductive approach (Creswell, 2009). However, data in scientific studies cannot be collected or coded in an epistemological vacuum and researchers cannot free themselves of theoretical and epistemological commitments (Braun and Clarke, 2006). Therefore, as opposed to induction, a deductive approach collects data to examine a theoretical position (Saunders *et al.*, 2012).

Therefore, this study adopts a deductive approach to observe the little that is known about the behaviour of actors in the rating process in order for data to be collected and coded in a social-constructivist context. The imperative for choosing a deductive over an inductive approach is that theory-based deduction supports the creation of sub-themes and main themes in the later stages of research (Howell, 2013). Also, in view of the objectives of the current study, a deductive approach is most pertinent in studies that aim to explore rather than construct theory (Trafford and Leshem, 2008). Hence, deduction in the current study will make it possible to test assumptions on notching and tying and to make conclusions that may modify these assumptions.

### **3.6 Research Strategy**

One of the great divisions of social science research is the dichotomy between quantitative and qualitative research strategies being separately underpinned by their complementary paradigms of inquiry (Creswell, 2013). In the current inquiry, a

qualitative strategy is preferred to exclude some of the limitations of quantitative strategies which include the inability to assess the social construction of reality by human actors, the subjectivity of meanings, phenomena and the experience of participants as well as the analysis of processes (Denzin and Lincoln, 2005).

Accordingly, a qualitative strategy is most effective for studying hidden concepts that are entrenched in attitudes and behaviours (Babbie, 2004). Furthermore, Guba and Lincoln (1994) affirm that the personal preference of a researcher is also a valid criterion for electing a research strategy but in issues of financial governance and regulation a qualitative framework bears the most advantages to evaluate procedures and recommend improvements (Schein, 1996). This is because more times than often, in the corporate environment, the group and institutional cultures are the leading social and contextual factors that affect change and decision making. In the same vein, several scholars are of the mind that a qualitative strategy prioritises the examination of phenomena through the actions of people within a social process (Strauss and Corbin, 1998; Denzin and Lincoln, 2005; Saunders *et al.*, 2007). Additionally, a qualitative strategy supports the nature of the current study and mirrors the deductive approach and social-constructivist paradigm to generate conclusions from the experiences of participants. For these reasons, a qualitative strategy is preferred in the current study to examine notching and tying practices in the rating process and to discover the impediments of new CRAs in the rating industry.

### **3.7 Designing Qualitative Research**

Richey and Klein (2014:36) argue that designing qualitative research entails 'establishing the general framework of a study and addressing each phase of the

investigative process'. In the same vein, Creswell (2009:3) describes research design as 'a process in terms of plans and procedures for the research that spans decisions from broad assumptions to detailed methods of data collection and analysis'. The critical steps of designing research are the definition of concepts, planning of the study, data collection, analysis, interpretation and report presentation (Creswell, 2013). Accordingly, researchers commence social inquiry by choosing between or combining qualitative and quantitative approaches based on the peculiar field of inquiry, the aims of the study and the nature of the research questions. Subsequently, researchers compare and select a paradigm to inform and guide the research process. Thereafter, researchers apply a methodology to link the research paradigm with the phenomena or variables [in quantitative research] being observed. Successively, a data collection method is chosen and concluded with an elected technique for analysis.

Furthermore, qualitative research can be described as the use of data expressed through words that can be collected and analysed using various methods (Braun and Clarke, 2013). Creswell (2013:44) defines qualitative research as 'the assumptions and the use of interpretative or theoretical frameworks that inform the study of research problems by addressing the meaning that individuals or groups ascribe to a social or human problem'. This is because an intrinsic characteristic of qualitative research is that they occur in natural settings (ibid). In the same way, qualitative research 'allows access to people's subjective worlds, meanings and to groups marginalised (e.g. by their gender, sexuality, race/ethnicity/culture) and often invisible within western psychology' (Braun and Clarke, 2013:8). Nonetheless,



qualitative research goes beyond data and methods but also includes the application of qualitative techniques within a qualitative paradigm (ibid).

Thus, the current study explores the phenomena and perceptions on notching and tying during the rating process between underwriters and rating analysts. These phenomena are assumed to persist in the relationships and events that transpire during the rating process. Correspondingly, a number of studies have also adopted a qualitative design to study the interactions between underwriters and rating analysts in the UK (Duff and Einig, 2009; 2015; Einig, 2008). In the current study, a qualitative approach was deemed appropriate for the reasons explained below.

Firstly, as the research aims to explore the perceptions of participants, semi-structured interviews are the implied methods of data collection (Creswell, 2013). In the alternative, a quantitative approach will pose the risk of narrowing the research questions to the extent that they become too simplistic to explore using instruments like questionnaires (Sensing, 2011). Using a qualitative approach, it is possible to explore more of participants' responses and seek further discussion to deepen understanding about the phenomena. In fact, researchers have often chosen interviews over questionnaires because they are an interactive tool for exploring insiders' experiences of phenomena that are subjectively different from those of an outsider (Schein, 1984). There is also a belief that interviews are better than questionnaires at capturing the full complexity of studied phenomena because the conversational style of data collection in the former accommodates spontaneous responses to answer the range of research questions (ibid). Secondly, owing to a

shortage of literature on the phenomena of notching and tying, it is not possible to create hypotheses and demonstrate relationship between variables. This is because there is very little awareness in literature on the factors or variables that are significant to the participants (rating analysts and underwriters) in this study as far as alleged notching and tying practices are concerned. Thirdly, there is a need to discover participants' thoughts, beliefs and values about notching and tying as they relate to behaviours in the rating process. The previous studies in the professional literature [GQR (2002) and Carron *et al.* (2003)] only investigate senior executives across the board who do not directly possess experience of the rating process. Therefore, there is little theoretical understanding of the reality of being 'notched' or 'tied' in the academic literature.

However, the choice of a qualitative design poses certain challenges and disadvantages to the current research process. The collection of data is time-consuming in terms of securing willing participants, conducting the interviews and transcribing large amounts of data. Yet, these challenges are typical with research investigating professionals in financial services due to enforced confidentiality and disclosure rules in the environment (Latimer and Maume, 2014).

Furthermore, in undertaking qualitative research, there are different designs that can be applied and they are referred to as the qualitative taxonomies. There are five taxonomies described by Creswell (2013): narrative research, phenomenology, ethnography, case study approach and grounded theory. There is also the lone taxonomy of thematic analysis described by Braun and Clarke (2006). To proceed,

these methods are briefly discussed with the rationale for rejecting certain taxonomies and for adopting the chosen one.

### **Narrative Research**

Narrative research has developed from the humanities and narrative researchers study the lives of a group of individuals before focusing on the extensive accounts of one or more individuals within the group (Creswell, 2013). Narrative research is not designed to be a historical record but to provide insights into the perspectives of a storyteller in the context of his or her life (Ary *et al.*, 2013). In this study, narrative research is rejected as a method because it leans too much towards the individual representations of phenomena to the impairment of external circumstances that may influence actions and decisions in the rating process. On the contrary, the current study investigates the perceptions of rating analysts and underwriters as groups in the rating process vis-à-vis the inherent and subjective conditions in debt issuance.

### **Phenomenology**

With origins in philosophy and psychology, phenomenological research aims to describe the lived experiences of individuals about a phenomenon as recounted by participants in a study (Creswell, 2013). In the same vein, Ary *et al.* (2013: 502) write that 'in the same way that ethnography focuses on culture, a phenomenological study focuses on the essence or structure of an experience. Phenomenologists are interested in showing how complex meanings are built out of simple units of direct experience'. In phenomenology, it is essential that philosophical assumptions are clearly outlined and examined so that personal

experiences are bracketed out (ibid). Also, it is typical for phenomenological researchers to investigate their personal experiences of the research problem before conducting interviews in order to understand their own biases and assumptions (Creswell, 2013). However, this study does not adopt phenomenology for two reasons: Firstly, 'bracketing out' the personal experiences of participants would interfere with the interpretation of data and secondly, the investigator has no personal experience of the rating process and therefore is unable to share or contribute to the perceptions of rating analysts and underwriters.

### **Ethnography**

Ethnography is a qualitative design method that was developed in anthropology and sociology to enable researchers to use interviews and observations to investigate the common patterns of behaviour, language and actions of a cultural group in their natural setting over a period of time (Creswell, 2013). Ethnography allows researchers to describe the culture of intact groups by understanding the lives of participants within those groups. This usually requires researchers to become part of particular groups to be immersed in the culture in the course of undertaking fieldwork (Skinner, 2012). Regrettably, due to access constraints and the confidentiality of the rating process, it was not possible to undertake ethnographic fieldwork to study the beliefs, values and attitudes of participants in their natural setting.

### **Case Study**

Briefly, the case study method has morphed from the fields of medicine and law into management studies. Its purpose is to address a research question by an in-depth

description of one or more cases or bounded systems (Erford, 2014). Cases could be a program, an event, an activity, a process or one or more individuals that are bounded by time and activity (Creswell, 2013). In this study, a case study approach is not suitable because an in-depth description of only one or more units would have the potential of concealing the dynamic characteristics and position of other actors in the rating process.

### **Grounded Theory**

The term grounded theory denotes theory that is developed inductively from a body of data (Bernard, 2012). It is a method established in sociology by which researchers derive a generalised and abstract theory of a process, action or interaction that is generated from the views of research participants (Creswell, 2013). With intent, grounded theory 'is designed to develop a theory of social phenomena based on field data' (Ary *et al.*, 2013:33). Through its application, grounded theory 'systematically collects data, identifies categories found in the data, connects those categories and uses the resulting information to inductively form a theory' (Erford, 2014:106). The unique feature of grounded theory is that it develops categories that illuminate data for saturation to demonstrate important characteristics that can form new theory (Silverman, 2006). The advantage of using grounded theory is that it supports the emergence of original findings from data (Jones *et al.*, 2005). On the other hand, the disadvantage of grounded theory is that, firstly, it can be an exhaustive process in which researchers become inundated with coding (Myers, 2009). Secondly, there are different approaches to grounded theory which could lead to confusion in the process of interpretation and analysis (Jones *et al.*, 2005). In this study, a grounded theory approach is not suitable because, firstly,

as an inductive taxonomy it opposes the deductive research approach adopted in section 3.5. Secondly, the construction of theory is not an objective of this study.

### **Thematic Analysis**

According to Braun and Clarke (2006:6), 'thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data'. Thematic analysis is also a 'systematic evidence synthesis technique used for qualitative data...rather than focussing on the categorisation of data by specific content types, it summarises data through the interpretation of larger themes that can be presented in tabular and graphical form. It is typically used in interview studies' (Athanasίου and Darzi, 2011:16). Although thematic analysis is only implicitly claimed in most studies or tucked into other methods, a lot of these other methods are indeed fundamentally thematic in seeking the recurrence of themes (Meehan *et al.*, 2000). Indeed, Willig (2013:57) states that 'thematic analysis underpins most other methods of qualitative data analysis' and 'should be seen as a foundational method for qualitative analysis' (ibid). The view of Braun and Clarke (2006) is that thematic analysis provides core skills that are essential for conducting many other forms of qualitative analysis.

On its own, thematic analysis distinguishes itself from other methods because it is not fixed on a prior theoretical approach but bears the flexibility of being pliable to different theoretical approaches (Braun and Clarke, 2006; Willig, 2013). The aforementioned flexibility also makes it possible to apply thematic analysis in exploring a range of questions that could be positivist, post-positivist, constructivist or participatory (Willig, 2013). Willig (2013) adds that the choice of thematic

analysis does not limit a researcher to a fixed epistemological orientation even though a commitment to epistemology is still needed to advance research.

The advantages of applying thematic analysis abound in literature. Firstly, in under-explored areas thematic analysis has a greater power in generating hypothesis in comparison to other research methods (Athanasiou and Darzi, 2011). Secondly, thematic analysis accommodates diverse subject areas and divergent interpretations (Boyatzis, 1998). Thirdly, thematic analysis allows researchers to determine precise relationships between concepts and to compare these concepts with replicated data (Alhojailan, 2012). Finally, and most importantly, thematic analysis is a highly effective approach for investigating hidden perceptions and diverse attitudes towards issues or processes that a sample group share in common (Coolican, 2014).

However, in spite of its significant advantages, thematic analysis has some disadvantages. The first disadvantage is its limited interpretative power if it is not applied within an existing theoretical framework (Glenwick, 2016). Secondly, the 'poor demarcation' of thematic analysis means that the method 'currently has no particular kudos as an analytic method' (Braun and Clarke, 2006:28). Thirdly, the reading and re-reading of data that thematic analysis entails is very time consuming (Braun and Clarke, 2006). Lastly, thematic analysis has often been criticised for lacking clear guidelines for its application (Fielden *et al.*, 2011). Nevertheless, the succeeding section 3.8 rationalises the choice and suitability of thematic analysis in the current study and explains how the aforementioned weaknesses are addressed.

### **3.8 Choice of Thematic Analysis in this Study**

The prior literature on notching and tying fell short of identifying themes around both phenomena that could direct further empirical investigation. As a result, the current study aims to address this shortcoming by generating themes from participants' understanding and experiences of both phenomena. Hence, a thematic analysis is adjudged to be the most fitting research design to generate themes that will make a contribution in the area of notching and tying in the literature. More to the point, the expressed limitations of thematic analysis are mitigated in this study by the construction of a firm theoretical framework and the adoption of a six-stage thematic analysis procedure as specified by Braun and Clarke (2006). Significantly, the work of Braun and Clarke (2006) gives kudos to thematic analysis as an established and valid research method. The procedure that they specify makes a clear demarcation of thematic analysis, aids understanding of what thematic analysis is, guides how it should be carried out and accommodates a flexible epistemological position for qualitative researchers (Fielden *et al.*, 2011). Therefore, the methodological goal of the current study is to design a thematic analysis that is clear, replicable and consistent, while detailing the often-omitted account of 'how', what was done and 'why', for the analysis conducted herein.

To advance research in notching and tying, the current study seeks and presents the individual experiences of professionals in the credit rating process and the meanings that they ascribe to these experiences. Additionally, and importantly, the current study considers the impact of the wider social context of debt finance on these meanings. Braun and Clarke (2006) describe the process of incorporating social contexts in the interpretation of meanings as the 'contextualist position', in



other words the contextualist epistemology (theory of knowledge). Braun and Clarke (2006:9) explain further that a contextualist position resides between realism and constructivism and it is 'a method which works both to reflect reality and to unpick or unravel the surface of reality'. In this regard, the rating process for the issuance of debt securities exists in a social context where meanings and their individual ascriptions are exclusive to the individuals participating in the process [rating analysts and underwriters]. This study is therefore contextualist through a social-constructivist paradigm for, firstly, considering the presence of notching and tying in the rating process by exploring the experiences of research participants and the meanings that they attach to these experiences. Secondly, this study is contextualist in a social-constructivist paradigm for incorporating the wider impact played by society in shaping the contrived meanings of participants and the understanding that they share. Finally, the current study adopts Braun and Clarke's (2006) approach to thematic analysis on the basis of citation count which was 23,517 citations as at 27/11/2016, compared to the second most cited work by Fereday and Muir-Cochrane (2006) with 2,130 citations also as at 27/11/2016.

### **3.9 Conclusion**

In conclusion, this thesis has adopted a qualitative approach to answer questions that have only been mooted but not actively investigated in the credit rating literature. Ultimately, it is, along with its objectives, conditioned by the contextual and social nature of the rating process and the elusiveness of the investigated phenomena of notching and tying. Thus, qualitative research and thematic analysis, in particular, makes it possible for evidence hidden in the phenomena to emerge and be investigated.

To summarise, this chapter has explained the various paradigms of inquiry within qualitative research and clarified their ontological, epistemological and methodological peculiarities. After appreciating the scope, strengths and weaknesses of the various paradigms in light of the current research problem, the social-constructivist paradigm is elected as the most appropriate epistemology to support the aim of this study as well as its objectives. Social-constructivism adopts the philosophical position that meanings are socially constructed by people in given settings or situations. By and large, issues of financial regulation and institutional governance are a social process and therefore are best investigated and understood through human activities, actions and interactions. Furthermore, the current chapter reflected on the inductive and deductive approaches to research and explains the preference for a deductive approach. The chapter then proceeded to discuss various methods of qualitative research including narrative research, phenomenology, ethnography, case study, grounded theory and thematic analysis. Accordingly, it was determined that a thematic analysis research design best fits the aims, phenomena and limited prior knowledge in this study.

Finally, the reasons for adopting thematic analysis in this study were explained along with its suitability for handling deductive data. Equally the underpinnings of thematic analysis as a valid analytic method were clarified to reinforce its place as a valid qualitative research method. The next section presents the protocol for data collection and analysis in this study by way of methods. It specifies the research design protocol of the study including the access, location and sampling of the current study's participants.

## **CHAPTER FOUR: METHOD**

### **4.1 Introduction**

The previous chapter explored the various paradigms of inquiry and rationalised the choice of the social-constructivist paradigm. It justified the choice of a qualitative research strategy and explained the adoption of thematic analysis. Going forward, the current chapter clarifies the difference between methodology and methods and discusses the thematic analysis research design in more depth. It addresses important research design protocols including data collection, sample location and access to participants.

To proceed, methodology and methods are often used in place of each other but they mean different things. Kumar (2008) describes methodology as the strategy to systematically solve a research problem with the selection of relevant research methods. In other words, the implementation of a methodology is through the combination of various methods. Therefore, research methods refer to the manner in which data is collected, analysed and interpreted. Also, Kothari (2004) refers to research methods as the methods and techniques available in the conduct of research. These methods and techniques are the instruments employed to gather information or data and they can be questionnaire surveys, interviews, ethnographic fieldwork or others. Another differentiator between methodology and methods is that methodologies are not methods in themselves but an aspect of epistemology that expresses the foundation and nature of the methods to be chosen. Methods are indeed components of methodology and include the rationale for choosing specific research designs (Kothari, 2004).

Hence, in the process of conducting careful research, a researcher studies all relevant methods of data collection before focusing on that which fits the research aims and objectives and best answers the research questions (Saunders *et al.*, 2009). The purpose of carefully considering all relevant methods of data collection is to pre-empt problems of data collection in the course of the research. Thus, carefully chosen methods generate the data intended by the research to match the outlined aims and objectives (Denscombe, 2014).

Furthermore, Creswell (2009) believes that a researcher's philosophical position determines the method of collecting data in line with the philosophy and paradigm of inquiry that supports the research. In this vein, Bryman (2008) asserts that the choice of positivism and post-positivism most certainly consigns a research inquiry to quantitative methods that employ structured questionnaires and/or structured interviews. Alternatively, constructivist and participatory philosophies will utilise methods that are flexible such as semi-structured interviews, field notes, participant observation, focus groups and document analyses (Charmaz, 2014). Hence, the aim of this chapter is as follows: firstly, to consider primary questions and make initial decisions on the use of thematic analysis. Secondly, to introduce the thematic analysis process that is undertaken in the current study. Thirdly, to justify the use of semi-structured interviews as a data collection instrument in the current study. Finally, to present the protocols for data collection, sample selection, location, limitations of access and disclosure and the ethical imperatives of the current study.

## **4.2 Primary Questions and Decisions**

According to Braun and Clarke (2006:9), 'thematic analysis involves a number of choices which are often not made explicit...but which need explicitly to be considered and discussed. In practice these questions should be considered before analysis of the data begins'. Thus, following the specification of Braun of Clarke (2006), the preliminary decisions in advance of undertaking the thematic analysis in this study centre on:

- What counts as a theme?
- The type of analysis to be undertaken
- Choosing between inductive or deductive analysis
- Identifying semantic or latent themes
- Clarifying the epistemology
- The question scope

Accordingly, these preliminary decisions and the choices made are briefly explained in relation to the current study.

- **What Counts as a Theme?**

Although a theme captures something of importance to a research question, there is no hard and fast rule on the size of data that should comprise a theme. In this regard, Braun and Clarke (2006:10) affirm that:

'It is not the case that if it was present in 50% of one's data items it would be a theme but if it was present only in 47% then it would not be. Nor is it the case that a theme is only something that many data items give considerable attention to, rather than a sentence or two. A theme might be given considerable space in some data items and little or none in others, or it might appear in relatively little of the data set. So researcher

judgement is necessary to determine what a theme is. Our initial guidance around this is that you need to retain some flexibility and rigid rules really do not work’.

Therefore, what counts as a theme is often its ‘keyness’ (ibid). On one hand, the ‘keyness of a theme is not necessarily dependent on quantifiable measures – but in terms of whether it captures something important in relation to the overall research question’. On the other hand, the keyness of a theme could be counted in terms of the number of different speakers who articulated the theme, across the entire data set, or each individual occurrence of the theme across the entire data set’ (ibid). They conclude that thematic analysis is flexible to determine themes either through importance or prevalence.

Finally, the current study benefits from the flexibility of thematic analysis to create themes on the bases of importance and prevalence but with consistency in the analysis process because ‘what is important is that you are consistent in how you do this within any particular analysis’ advice Braun and Clarke (2006:11).

- **The Type of Analysis**

The type of analysis concerns the focus of the claims to be made from a data set. The question asked here is whether to undertake a rich thematic analysis of the whole data set or whether to undertake a deep thematic analysis that focuses on particular themes within the data set.

In the first instance, thematic analysis that focuses on the whole data set typically creates themes and codes them to be representative of the entire data set in order that readers are able to grasp the prevalent and important issues and patterns. In the second instance, a thematic analysis that focuses on particular themes strives to achieve ‘a more detailed and nuanced’ presentation of the issues and patterns within particular themes (Braun and Clarke, 2006:11). The particular themes are typically crucial research questions, special areas of interest in the data set, or insightful latent themes.

Thus, the analysis conducted in the current study is of the second type – a deep thematic analysis. It will focus on the themes that relate to the research questions to analyse the inherent issues in a meticulous manner. The implementation of deep thematic analysis is essential in this study to maintain a focus on the research questions and the outlined objectives. In the alternative, in a rich thematic analysis that analyses the entire data set, ‘some depth and complexity is necessarily lost even if the overall data set is represented (Braun and Clarke, 2006:11). Therefore, by embracing deep thematic analysis, a more exhaustive and detailed account of the issues and patterns that directly shed light on notching, tying and the impediments of new CRAs can be thoroughly investigated in this study.

- **Choosing Inductive or Deductive Analysis**

In the main, there are two alternate methods of identifying themes in qualitative research. The first method is the inductive method through which

themes are created on the basis of strong links with data. In other words, the themes that emerge do not fill any pre-existing framework of codes, nor satisfy any pre-existing theories. The second method of identifying themes is the deductive or theoretical method in which themes are created by the theoretical or preconceived interests of the researcher.

Braun and Clarke (2006:12) write that deductive analysis generates 'less of a rich description of the overall data and more of a detailed analysis of some aspects of the data'. Indeed, Braun and Clarke (2006) affirm that the choice between inductive or deductive analysis rests on how and why the data is being coded. They suggest that coding should be inductive when undertaken for broader research questions but deductive when undertaken for specific research questions.

Consequently, the current study adopts a deductive method to thematic analysis for two reasons: Firstly, 'data is not coded in an epistemological vacuum', therefore 'researchers cannot free themselves of their theoretical and epistemological commitments' (Braun and Clarke, 2006:12). Secondly, the research questions coded in this study are very specific to notching, tying and the impediments of competition among CRAs in the rating process.

- **Identifying Semantic or Latent Themes**

It is equally important to specify the basis on which themes are formed in any qualitative research. This basis or level pertains to whether themes are semantic or latent. Semantic themes are explicit themes that take on the



literal or surface meaning of the data that they embody, while latent themes take on the underlying ideas, assumptions and hints hidden in their data. Similarly, semantic themes could be understood as in-vivo codes while latent themes are descriptive codes that express subtexts (Saldana, 2012). Braun and Clarke (2006) suggest that thematic analysis studies should focus on either semantic or latent analysis.

Thus, in the current study, a latent analysis of themes is preferred for two reasons. Firstly, latent analysis is embraced to capture hidden and peculiar inferences in the social setting of the rating process. Indeed, Braun and Clarke (2006:13) mention that ‘the development of latent themes in itself requires interpretative work’ and the resulting codes are not mere themes but theories in themselves. Secondly, latent analysis is consistent with the preferred social-constructivist paradigm in this study where meaning is derived from the underpinnings of data articulated in a specific context (of the rating process).

- **Clarifying the Epistemology**

It is typical for the epistemology of a study to be clarified during the early and conceptual stages. However, the epistemological position also influences the analysis of data by guiding what can be said and how meaning is derived or theorised (Braun and Clarke, 2006). A great epistemological divide exists between the realists and the constructivists and it can be said that realists are objective while constructivists accommodate socially produced meanings and experiences. Even though the realist paradigm can equally theorise

social meanings and experiences, it can only do so by assuming and plotting unidirectional relationships between social meanings and experiences. In contrast, the social-constructivist paradigm is multidirectional in construing meanings from experiences but also from structural conditions and social contexts (ibid).

In the current study, a social-constructivist epistemology is preferred to theorise meanings in the data because the phenomena being studied do not reside with one individual in the rating process. Rather, the phenomena of notching and tying are socially produced and reproduced by actors in the rating process.

- **The Question Scope**

The last primary decision suggested by Braun and Clarke (2006) concerns the range of questions to be asked during the data collection process and the relationship between the different questions in the questionnaire (whether structured or semi-structured). Firstly, they recommend the use of broad and exploratory questions that 'drive the project' and secondly, the use of narrower questions that inform but 'also provide answers to the overall research question'. Thirdly, 'there are questions that guide the coding and analysis of the data. There is no necessary relationship between these three and indeed, it is often desirable that there is a disjuncture between them' (Braun and Clarke, 2006:15). However, when questions are used as a guide

for coding, there is the danger that rigour is lost as the themes in the analysis are merely the questions put forward to the participants (ibid).

Therefore, the current study adopts the broad and narrow question approaches as evidenced in the semi-structured questionnaire in appendix I and demonstrates the desired 'disjuncture', firstly, by posing broad and exploratory questions on competition in the rating industry. It does this by asking participants why they think the credit rating industry is dominated by a few players and whether they would like to see more rating agencies entering the industry. Secondly, to provide insights into competition in the industry, the current study poses narrower questions on decision making and motivations in the rating process by interrogating intentions and motivations in the rating of asset classes, security pools and bonds with counterpart ratings. Thus, the preference of the broad and narrow question scope to coding and the creation of themes in this study is to facilitate searching across the data set to find recurring experiences, patterns and meanings in a lateral manner.

At this point, after considering the primary questions and having made key decisions on the research method, section 4.3 proceeds to device a step-by-step procedure of the thematic analysis technique applied in this study.

### **4.3 Thematic Analysis Technique**

According to Braun and Clarke (2006), there are 6 stages of conducting thematic analysis that are not exactly isolated from other methods of qualitative research. In sequence, these stages are: familiarisation with data, generation of initial codes, the search for themes, the reviewing of themes, the definition and naming of themes and finally, the production of a report. However, before these stages can be undertaken, it is pertinent to address important issues regarding the study's data collection protocol, location, sampling method, data collection instrument, access to participants and the ethical imperatives of this study.

### **4.4 Data Collection**

This section presents the data for this study to answer the three research questions put forward in chapter 4. It proceeds to describe the sampling methods available in qualitative research and explains the sample selection procedure for the current study.

#### **4.4.1 Data for this Study**

The data in this study are wholly primary text data from 15 debt market participants collected over a seven months period between December 2014 and June 2015.

The reasons for targeting market participants in the UK and US are:

1. The presence of the Big Three's major operations in the UK and US. Particularly, the concentration of financial services operations in London and New York has caused the localisation of the Big Three in Canary Wharf and Wall Street.

2. The higher concentration of professionals with experience in the rating process in the UK and the US. This study benefits from sampling professionals with experience of working at, or liaising with, the Big Three in the rating process. Therefore, they are in a knowledgeable position to answer the research questions.
3. The international equivalence of rating processes, financing processes and industrial regulation in the UK and US.

To support these reasons, the Committee of European Securities Regulators (CESR) affirms that:

‘Overall, the US legal and supervisory framework is broadly equivalent to the EU regulatory regime for credit rating agencies in terms of achieving what CESR considers to be the overall objective of assuring that users of ratings in the EU would benefit from equivalent protections in terms of the credit rating agencies’ integrity, transparency, good governance and reliability of the credit rating activities’ (CESR 2010:4).

Furthermore, of the 15 interviews 5 were conducted by telephone while 10 were conducted face-to-face. The telephone interviews were recorded using the TapeACall mobile application and they were subsequently transferred to a PC for transcription from audio to text. The investigator personally undertook the transcription of all interviews. Tilley (2003) advises that it is important for researchers to transcribe their own data because the person who undertakes the transcription influences meanings in the transcripts. Likewise, Lapadat and Lindsay (1999) assert that value lies not only in the finished transcript but in the process of

completing the transcript because analysis, interpretative thinking and understanding occur through repeated listening and playback.

#### **4.4.2 Sample Selection**

A sample is a group within a population that is observed to make inferences about the nature or behaviour of the entire population (Rubin and Babbie, 2009). In qualitative research, it is not necessary to collect data from all the respondents in the target community even if it were possible. Rather, the research objectives and the characteristics of the study population such as size, age, experience and gender should condition the number of respondents to select and how to select them (Hair *et al.*, 2010). Patton (2002) posits that it is advantageous for sampling methods to allow for the identification of a subset of persons with diverse experiences. The following sub-sections explain the possible sample selection methods in qualitative research.

- **Convenience Sampling**

Also known as accidental or haphazard sampling, convenience sampling is when respondents are selected for their availability and willingness to participate in a study (Gravetter and Forzano, 2015). It is typical for studies in health facilities or research involving drug use to rely on convenience sampling. The advantage of convenience sampling is its ease of application and inexpensiveness in attracting respondents (Hair *et al.*, 2015). In spite of this significant advantage, convenience sampling has been adjudged to be a biased method because subsets of the research population could be over or under selected, or outrightly omitted. It is argued that this leads to a high

probability that the resulting sample is not representative of the general population (Gravetter and Forzano, 2015).

- **Purposive Sampling**

Also known as the purposeful sampling strategy, researchers engaged in this method intentionally select the respondents that will best contribute to the study or, as Patton (2015) states, selecting information-rich and illuminative cases for qualitative inquiry. Polit and Beck (2014) affirm that this intentional selection is based on the information needs that have emerged from early findings. They add that other strategies exist within purposive sampling to meet the various conceptual needs of qualitative research. These other strategies are maximum variation sampling, extreme (deviant) case sampling, typical case sampling and criterion sampling.

### **Maximum Variation Sampling**

The purpose of maximum variation sampling is to capture the diversity of a phenomenon within a small sample that is to be intensively studied (Rubin and Babbie, 2009). The benefit of maximum variation sampling is that more useful insights are generated by observing phenomena in heterogeneous conditions because they cut across a great deal of variation (Patton, 2015). Problems can arise in the analysis of data if a great deal of heterogeneity is found in a small sample because the inputs are very different from one another. However, Patton (2015) believes that, in the midst of great variations, the common patterns that emerge are particularly valuable for the purpose of capturing the core experiences and shared dimensions of a phenomenon. In the same way, Martella *et al.* (2013) explain that the purpose of maximum variation

sampling is to obtain detailed descriptions of each case or from each respondent and to document the unique and general patterns shared by these respondents.

### **Extreme (Deviant) Case Sampling**

Researchers apply the extreme case sampling technique when there is a conceptual opportunity to answer research questions or meet research objectives from outliers. Martella *et al.* (2013) discuss this type of sampling as the selection of those cases that are the most outstanding successes or failures related to some topic of interest. Thus the purpose of extreme case sampling is to explore further insights in outlying phenomena.

### **Typical Case Sampling**

Typical case sampling involves selecting participants that provide average or normal responses (Polit and Beck, 2014). Typical cases are straightforward in providing insights into usual occurrences. This sampling technique is useful for completing qualitative profiles of 'typical' cases that can be selected through demographic analyses or statistical data that show a normal distribution of attributes that allude to average conditions. The purpose of typical case sampling is to describe the commonalities in cases and a setting and not to make generalised conclusions. However, Patton (2015) cautions that typical case sampling is only an illustrative method and not a definitive process.



## **Criterion Sampling**

Users of criterion sampling aim to satisfy a predetermined criterion of importance (Polit and Beck, 2014). Only cases or respondents who meet or surpass the set criterion are included in the sample (Martella *et al.*, 2013). It is argued that during their analysis, researchers applying criterion sampling can explicitly or implicitly compare criterion cases with those that do not satisfy those criteria. In addition, the benefit of criterion sampling is that it facilitates the identification of cases that could be followed-up for further exploration (Patton, 2015).

- **Quota Sampling**

As a sampling technique, quota sampling fills important categories in the larger population with a predetermined number of respondents (Patton, 2015). According to Martella *et al.* (2013), quota sampling is key to deriving a sample from a heterogeneous population for which researchers have no exhaustive list. The benefit of quota sampling is that subgroups or categories within the population are duly represented (Gravetter and Forzano, 2015). Similarly, it allows for high representation if the population can be subdivided into one or more variables that make up the known proportions of the population and if relationships can be maintained within samples taken from each subdivision. Martella *et al.* (2013) explain further that quota sampling involves the following three steps:

1. identifying the important categories that are present in the whole population and determining the proportions of the population that fall into the important categories identified
2. determining the sample size and the associated data for each important category

3. selecting the members of each category using non-probabilistic measures like opportunity and volunteer sampling

The benefit of quota sampling is that it allows the researcher to control the composition of the sample with categories that meet set criteria (Gravetter and Forzano, 2015). In addition, Patton (2015) explains that quota sampling ensures that important categories are included in the study whether they are demographic, geographic or theoretical. Quota sampling also facilitates budgeting and logistical calculations because its design specifies the quota for all categories. Furthermore, an overriding advantage of quota sampling is that it can be flexible to allow researchers adjust the size and composition of quotas as the study develops and to make comparisons between different categories (Patton, 2015).

#### **4.4.3 Research Sample in the Current Study**

Given the advantages and disadvantages of the sampling techniques discussed in 5.4.2 above, the preferred sample for this study is a cross between criterion sampling and quota sampling for the purpose of fulfilling the important criterion of rating process experience (criterion sampling) and the filling of important categories (quota sampling) on the sell and buy side of the rating process. Following the precedence of Duff and Einig (2009; 2015), the combined use of criterion and quota sampling also allows this study to assume the advantages of case identification and flexible quota adjustment (Patton, 2015). Accordingly, this study satisfies the three conditions of quota sampling suggested by Martella *et al.* (2013) in the following ways:

- identifying rating analysts and underwriters as the important categories in the population of financial services professionals
- stipulating a sample size of 15 to compare with previous credit rating studies (Duff and Einig, 2009; 2015)
- recruiting respondents from subscribed LinkedIn groups and non-probabilistic snowball sampling

Previous studies such as GQR (2002) and Carron *et al.* (2003) that explored notching practices broadly sampled senior executives in the financial market without conditioning for experience in the definitive rating process where notching and tying phenomena potentially occur. Practically, only a small quota of structured finance executives engages in the rating process and therefore the sample for this study was limited to rating agency and issuing professionals:

1. with working experience and knowledge of the rating process. This is due to the recognition of different functions and use of ratings within CRAs and underwriting institutions of debt security;
2. with prior and existing association with the Big Three. This condition is fundamental to investigating the research objective of exploring the notching and tying practices allegedly manifested by the Big Three;
3. in the UK and US for purposes of international equivalence<sup>37</sup>.

The conditions outlined above and the proportion of structured finance executives engaged in the rating process point directly to rating analysts on the sell side and underwriters (also known as investment bankers or financiers) on the buy side of the rating process.

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<sup>37</sup> The notion of international equivalence by the CESR has been previously explained in section 4.4.1

#### **4.4.4 Respondent Characteristics**

Following criterion and quota sampling, respondents in this study were divided into two categories of 'rater' and 'rated'. In the interest of confidentiality, respondent names were eliminated and replaced with alphabets A to O to meet the ethics requirement of Plymouth University. In addition, respondents' job titles were replaced with the positions of 'Rating Analyst' and 'Underwriter' to denote the opposing roles played in the rating process. Respectively, there were six and eight respondents in the rater and rated quotas respectively. To prevent the over selection or under selection of sample categories (Gravetter and Forzano, 2015), a portfolio manager at an investment firm was added to the rated category. The total sample of 15 favourably surpasses similar exploratory studies by Duff and Einig (2009; 2015) by one respondent. The table below summarises the participants interviewed during the data collection phase spanning seven months. Thus:

**Table 5 Respondent Details**

<b>Respondent</b>	<b>Category</b>	<b>Position</b>	<b>Appointed CRA(s)<sup>38</sup></b>	<b>Duration</b>	<b>Date</b>
<b>A</b>	Rater	Rating Analyst	Moody's	42 mins	06-01-15
<b>B</b>	Rater	Rating Analyst	Ex-Moody's, New CRA	119 mins	13-02-15
<b>C</b>	Rater	Rating Analyst	S&P	52mins	22-01-15
<b>D</b>	Rater	Rating Analyst	Ex-Moody's	39 mins	12-12-14
<b>E</b>	Rater	Rating Analyst	Ex-S&P	69 mins	25-05-15
<b>F</b>	Rater	Rating Analyst	Ex-Moody's, New CRA	61 mins	26-02-15
<b>G</b>	Rated	Underwriter	Moody's, S&P, JCRA	74 mins	24-06-15
<b>H</b>	Rated	Underwriter	Moody's	122 mins	01-12-14
<b>I</b>	Rated	Underwriter	Moody's, S&P, Fitch	83 mins	19-03-15
<b>J</b>	Rated	Underwriter	S&P	90 mins	03-06-15
<b>K</b>	Rated	Underwriter	Moody's, S&P, Fitch	36 mins	12-05-15
<b>L</b>	Rated	Underwriter	Moody's, S&P	29 mins	13-04-15
<b>M</b>	Rated	Underwriter	Moody's, S&P, Fitch	45 mins	12-05-15
<b>N</b>	Rated	Portfolio Manager	Moody's, S&P	33 mins	19-02-15
<b>O</b>	Rated	Underwriter	Moody's, S&P, Fitch	40 mins	23-02-15

#### 4.5 Research Sample and Respondents in Previous Studies

The few examples of previous studies in credit rating research that have embarked on collecting primary data are Ellis (1998), Graham and Harvey (2001), Baker and Mansi (2002), Duff and Einig (2009; 2015) and the prior study conducted by GQR (2002). The purpose and sample of these studies are discussed below.

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<sup>38</sup> Appointed CRA(s) represents employer(s) for respondents A – F and commissioned CRAs for respondents G – O.

Firstly, Ellis (1998) surveyed 200 chief financial officers (CFOs) of investor-owned utility companies along with 400 individuals representing institutional investors of fixed income securities. The purpose of the study was to determine which CRAs the members of both groups perceived to be more accurate and to understand how both groups utilised the services of CRAs. Secondly, in their study of capital budgeting and capital cost, Graham and Harvey (2001) surveyed 392 CFOs to determine whether good credit ratings are a defining factor in the debt policy of many financial institutions. The 392 CFOs were targeted from the 1998 Fortune 500 list and a further mail out of 4,440 questionnaires to members of the Organization of Financial Executives International (FEI). In this sample, 313 of the Fortune 500 CFOs were also members of the FEI. Thirdly, to examine the characteristics of rating quality in the debt market, Duff and Einig (2009) determined that, in order of importance, the key properties of rating quality are: reputation, trust, values, transparency, timeliness, expertise, investor orientation, methodology, co-operation, independence, issuer orientation, internal process and responsiveness. To reach this conclusion, they sampled 198 financial managers of debt companies, 90 debt investors and 120 other interested parties from a total pool of 2400 potential participants. Fourthly, Baker and Mansi (2002) studied how corporate bond issuers assessed CRAs before seeking ratings. They targeted 474 senior finance officers including CFOs, Vice-Presidents and Treasurers of companies with publicly traded debt on the one hand and on the other, they sampled institutional investors of 387 mutual funds as found in the Lehmann Brothers Fixed Income database of January 1998. Altogether, they generated 214 valid responses. Lastly, GQR (2002) targeted 305 senior executives of structured finance institutions in the US. They obtained

128 responses from senior executives representing 93 institutions using structured telephone surveys.

From the previous studies using the questionnaire instrument, it can be inferred that CFOs offer a reliable source of responses for bond issuers. However, the current study targets rating analysts on the sell side and underwriters on the buy side because the primary rating relationship in the debt market 'is between the financial manager (or underwriter) of the issuer and the CRA, with debt investors and other interested parties somewhat detached from the process' (Duff and Einig, 2007: VII). Therefore, investors and other interested market participants are not considered for sampling in this study.

#### **4.6 Location of Study**

For the purpose of international equivalence, this study focuses on the credit rating industry in the UK and the US. Indeed, the geographic concentration adds to the uniqueness of the current study as prior studies conducted by GQR (2002) and Carron *et al.* (2003) concentrated on bond issuers and investors in the US and not many studies on CRAs have focused on locations outside the US. Some rare examples of UK centric studies include Barron *et al.* (1997), Adams *et al.* (2003), Al-Najjar and Elgammal (2013), Duff and Einig (2012), Gonis *et al.* (2012) and Karimu (2016). However, these aforementioned studies, except Karimu (2016), have tended to focus on non-financial UK firms.

Noticeably, citations and analyses of the UK in CRA studies have mainly been in the area of sovereign ratings and not corporate ratings (Poon and Firth, 2005; Hänsel and Krahnen, 2007; Akdemir and Karsli, 2012; Duan and Laere, 2012; Trampusch, 2013). The greater concentration of CRA studies in the US is perceptibly due to its highly developed bond market in comparison to other regions (Maslakovic, 2009). In spite of this, there is significance in conducting a UK study as Duff and Einig (2012) contend that CRAs operate on a global basis; therefore, findings from the UK are generalisable for other regions. More to the point, outside the US, the UK is one of the leading bond markets and has experienced a corporate bond boom over the last few years. RBS (2013) believes that corporate bond issuance had never been as strong as it was in 2012 when UK companies issued £40.5bn worth of bonds and repaid £21bn on a net issuance of £19.5bn.

To conclude this sub-section, the credit rating literature suggests Moody's, S&P's and Fitch are the agencies that exhibit anticompetitive behaviours (notching and tying). Therefore, it is imperative to target underwriters and rating analysts with experience of working with the Big Three in the rating process. Consequently, this study adopted two corresponding protocols to approach the sample group in the early stages of research. In the first protocol, a list of 599 underwriters and rating analysts was drawn up from searching relevant professional interest groups on LinkedIn<sup>39</sup>. In the second protocol, the study relied on snowball sampling<sup>40</sup> for new

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<sup>39</sup> LinkedIn is a professional networking site with moderated business and personal interest groups. The groups targeted for inclusion in this study were Credit Analyst Club Worldwide, Financial Services Regulation, Financial Analyst Club Worldwide, and Risk Regulation and Reporting.

<sup>40</sup> Snowball sampling is the gaining of access to new participants on the suggestion or reference of previous participants (Saunders *et al.*, 2012).



participants that were recommended during interviews as the data collection phase progressed.

#### **4.7 Instrument for Data Collection**

The purpose of carefully considering the instrument for data collection is to maximise the response rate and avoid the nonresponse bias that imperils most empirical studies (Kielhofner, 2006). Stoop *et al.* (2010) define nonresponse bias as a substantive aversion of targeted participants not to participate in a study because of random situational factors or specific factors which may include the topic of the survey, the data collection instrument or its sponsors.

Being exploratory in its nature, the current study adopted semi-structured interviews as its data collection instrument due to the scarcity of empirical evidence on the rating process involving rating analysts and underwriters. Particularly, Duff and Einig (2009) have identified an overreliance on databases in credit rating research, as opposed to the observation of professional parties engaged in the rating process, to be a barrier in the understanding of the rating industry. Therefore, to advance links between the theory and the practice, semi-structured interviews are chosen as an instrument to observe actors in an exclusive process as recommended by Monette *et al.* (2010).

More to the point, as no two participants share the same experiences, constructing a rigid set of standard questions for the purpose of obtaining similar answers is not appropriate for the current study. Semi-structured interviews are preferred for being able to explore not only a range of key themes and questions but also to yield

flexibility to each participant to articulate own experiences for meanings that could be interrogated in more depth (Saunders *et al.*, 2012). Easterby-Smith *et al.* (2008) and (Saunders *et al.*, 2012) contend that semi-structured interviews are valuable for research situations in which there are several unanswered questions and should be used in tandem with note-taking and voice recording.

Once more, of the 15 interviews conducted in the current study, 10 interviews were note-recorded while 5 were voice-recorded due to disclosure concerns expressed by the participants. However, to the best of the investigator's ability, the note-records taken for the 10 interviews still articulate a thoroughly orthographic and verbatim account of participants' utterances as stressed by Braun and Clarke (2006). The outstanding 5 interviews were voice-recorded with a high quality recorder to isolate any background noise. The 10 note-recorded interviews were conducted face-to-face at mutually convenient locations. The 3 voice-recorded interviews were conducted over the telephone using a TapeACall mobile application on the investigator's iPhone while 2 interviews were conducted via Skype and recorded using a Voice Memo application also on the analyst's research assigned computer. All interviews were undertaken between December 2014 and June 2015.

#### **4.8 Pilot Test of Semi-Structured Interviews**

It is good practice and advisable to conduct a pilot test with the intended sample frame to get a better understanding of the variables being measured by the research questions and their suitability (Gratton and Jones, 2010). Kothari (2004) insists that a pilot study is a test of the interview questions and a rehearsal for the main data collection process because it brings to light the weaknesses of the

questionnaire so that modifications can be made for improvement. According to Cargan (2007), pilot interviews show whether the questions can produce accurate data. Likewise, Gratton and Jones (2010:141) suggest that piloting studies allow the researcher a 'dry run at analysing the data collected from the questionnaire' and aids preparation for future analysis.

In prior CRA related studies, neither GQR (2002) nor Carron *et al.* (2003) conducted pilot surveys, nor did Ellis (1998), Graham and Harvey (2001) and Baker and Mansi (2002). However, recognising its advantages at the early phase of data collection, the current study tested, modified and corroborated the initial questions for this study with 2 of the final 15 participants (see in appendices II and III). Accordingly, the 2 pilot studies were conducted in December 2014 to afford the investigator a 'dry run' at conducting the planned thematic analysis as laid out in the table 6 below:

**Table 6 Timeline for Pilot Study**

<b>Pilot Respondents</b>	<b>Category</b>	<b>Position</b>	<b>Appointed CRA(s)<sup>41</sup></b>	<b>Duration</b>	<b>Date</b>
<b>A</b>	Rater	Rating Analyst	Moody's	39 mins	12-12-14
<b>B</b>	Rated	Underwriter	Moody's	122 mins	01-12-14

Thus, the pilot interviews and the attempted dry thematic analysis posed the following problems:

- There was an overlap in the ordering of questions interrogating notching and tying phenomena in the pilot questionnaires (as shown in appendices II and III). This overlap made it difficult to allocate responses to various themes in

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<sup>41</sup> Appointed CRA(s) represents employer for pilot respondent A and commissioned CRA for pilot respondent B

the dry analysis and to focus the minds of the respondents through the course of the interview. Hence, the interview questions in appendix I improved the ordering of the questions and, by interrogating the phenomena one after the other, it better directed the mind of the respondents to answer the questions.

- The administering the pilot questionnaire from separate sheets made it difficult to ensure that alternate questions were effectively interrogating the rater and rated categories on the same issues. Hence, the interview questions in appendix I combined the questions for both categories in one sheet to guarantee a correlated exploration.
- The phrasing of question 11 aimed at investigating the pattern of the rating process was revised for being too descriptive and more suggestive of answers to respondents.

Accordingly, the re-ordering, rephrasing and revision of the questions from the pilot to main interviews ensured that the process of the latter effectively answered the research questions in the main interviews.

#### **4.9 Access, Disclosure, Ethics and Limitations in Data Collection**

From the outset, it was clear that the intended sample was an exclusive and difficult to reach target group. Additionally, disclosure limitations from participants were perceived early on as there were real concerns about the possibility of their responses damaging their employability and/or the reputation of their employers. In spite of the confidentiality assurance communicated in Plymouth University's ethical approval, two-thirds of the respondents in this study still opted for a strictly off-

record participation and several potential respondents elected non-participation altogether upon receipt of the interview questions.

By and large, the credit rating process is exclusive to rating analysts and underwriters. Therefore, to understand notching and tying this study appreciates the covert nature of the rating process between both parties (rating analysts and underwriters) as well as the general unwillingness of financial services professionals to participate in academic studies. To surmount this challenge, a cover letter was sent out to a targeted list of 599 rating analysts and underwriters with a brief outline of the study, a research ethics approval and a request for an interview. Of the 599 underwriters and rating analysts contacted, only 41 target participants responded to the cover letter and 29 of the 41 professionals declined the request for an interview. Their reasons include: internal corporate policy, too busy to participate, change of role and disinterest in the study. Of the outstanding 12 professionals, 7 responded with a firm yes, while 5 pledged to respond in due course and were followed up throughout the data collection phase. However, agreeing interview dates was a challenging task for all assenting professionals and this study ultimately relied on snowball sampling to densify the data and overcome the nonresponse bias.

Furthermore, it was very important to communicate an ethical approval to potential respondents in compliance with Plymouth University and the Faculty of Business' Research Ethics Committee on matters pertaining to respondents' informed consent, right to withdraw, protection from harm and confidentiality. After two revisions, a final approval was obtained from the Ethics Committee for the duration

of the study (see appendix IV). The research also recognised and conformed to the ethical codes of the Social Research Association and the British Sociological Association. According to Saunders *et al.* (2012), an ethical approval is particularly needed in research participated in by young or vulnerable persons. The notion of vulnerability could be extended to rating analysts and underwriters with concerns about their job security and employers' reputation. To reassure participants, confidentiality was re-stressed at the start of interviews and the ensuing notes and voice memos were solely taken or transcribed by the investigator.

Another challenge faced during the data collection for this study was confidentiality and the considerable caution shown by respondents to reveal trade secrets, client names and other identifiable information that could compromise professional and institutional interests. Even as this study guaranteed respondents' confidentiality, this particular challenge made it difficult to probe certain questions further during data collection.

#### **4.10 Computer Aided Qualitative Data Analysis Software (CAQDAS)**

Even though Braun and Clarke's (2006) six-stage-process provides a framework for analysis in this study, the management of a large amount of data in a systematic way to ensure efficient input and retrieval makes the use of a Computer Aided Qualitative Data Analysis Software (CAQDAS) inevitable. The CAQDAS used in this study is the NVivo 10 program as available on Plymouth University's information network and the software is only an instrument for coding in data analysis and does not by itself produce any analysis. Therefore, the use of NVivo 10 in this study did not replace the investigator's endeavour but acted as a means

to enhance the rigour of the analysis (Bazeley, 2007) and afford proximity between the investigator and the data (Pope *et al.*, 2000). Hence, the transcripts in Microsoft Word format in this study were uploaded to the NVivo 10 CAQDAS for coding.

#### **4.11 Conclusion**

In conclusion, this chapter has been exhaustive in making primary decisions on the implementation of thematic analysis in this study. It has been articulated that the themes in this study will be flexibly identified on the basis of prevalence and importance (or keyness). It has also been articulated that the analysis to be conducted will focus in-depth on particular themes to achieve a more detailed and nuanced presentation of the evolving issues and patterns surrounding the outlined research questions. Additionally, the creation of themes is to be done deductively by using existing theory, however scant, to guide the formation of primary codes because data is not coded in an epistemological or theoretical vacuum.

Furthermore, as opposed to semantic themes, this study has elected to undertake a latent analysis for the purpose of capturing hidden and embedded inferences in the social setting that is the rating process. Penultimately, it has been argued that a social-constructivist epistemology is most appropriate for the current study because of the inherent social production and reproduction of meanings among the research sample in the rating process. Finally, the utilisation of broad and narrow questions has been discussed as beneficial to facilitate searching across the data set to sense recurring experiences, patterns and meanings. Hence, the next chapter adopts and implements Braun and Clarke's (2006) 6 stage model and undertakes an analysis on the data collected for this study.

## CHAPTER FIVE: THEMATIC DATA ANALYSIS

### 5.1 Introduction

The previous chapter on methods has answered preliminary questions on the use of thematic analysis. It has also introduced the thematic analysis procedure carried out in this study and justified the use of semi-structured interviews as a data collection instrument. More so, the previous chapter explained the protocols for data collection, sample selection, participant access and disclosure, as well as the ethical considerations of the study. Hence, the purpose of the current chapter is to demonstrate and present the analysis of data using the thematic analysis method.

According to Braun and Clarke (2006), there are six stages of conducting thematic analysis. In succession, these stages are: familiarisation with the data, the generation of initial codes, the search for themes, the reviewing of themes, the definition and naming of themes and finally, the production of a report as shown in figure 1.3.

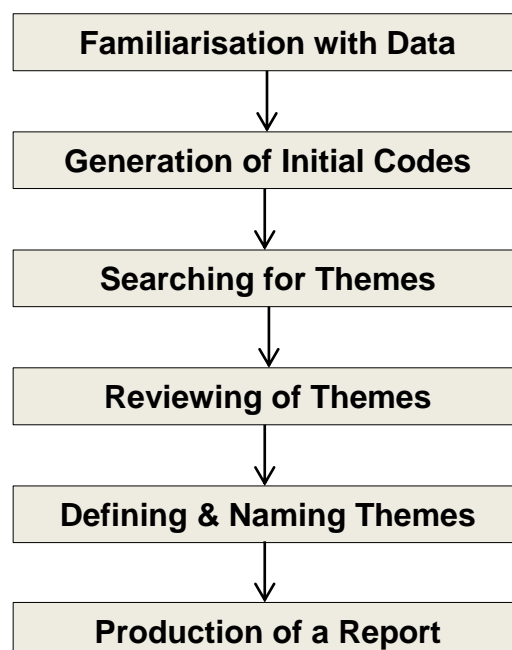


FIGURE 1.3 STAGES OF THEMATIC ANALYSIS IN THIS STUDY



Following this order, the current chapter presents a thematic analysis of the 15 semi-structured interviews conducted in the current study.

## **5.2 Stage 1: Familiarisation with the Data**

Braun and Clarke (2006:16) affirm that it is important for researchers to immerse themselves in the data to the extent that they become ‘familiar with the depth and breadth of the content’. To achieve immersion, researchers ought to read the data actively and repeatedly in a search for meanings and patterns (ibid). Although it is a time-consuming process, this phase of reading and re-reading data ‘provides the bedrock for the rest of the analysis’ (ibid:17). Furthermore, they state that familiarisation with data is achieved by ‘taking notes or marking ideas’ to be revisited in latter stages (ibid). In the current study, familiarisation with data was achieved through data processing, transcription and memoing as explained in the succeeding sub-section.

### **5.2.1 Data Processing, Transcription and Memoing**

For the most part, the questions in the pilot interviews were maintained in the main interviews due to endorsement from initial participants. The modifications informed by the pilot study were limited to the rephrasing of questions about asset classes and counterpart ratings.

Largely, participants in both the pilot and main interviews conversed in a formal manner with very little or no colloquialisms. Indeed, Saunders *et al.* (2012) caution that the presence of an audio or note recorder during the interview process may prompt respondents to use very formal language or restrain some of their

responses. Hence, throughout the interviews, the key questions on notching and tying were posed to participants at different times using different phrases to aid the reliability of responses and to defuse any inhibitions caused by the recording.

Furthermore, data collected verbally needed to 'be transcribed into written form in order to conduct a thematic analysis' (Braun and Clarke, 2006:17). The act of transcribing is not merely a mechanical practice of putting spoken words on paper. Rather, it is an interpretative act in which meanings are created (Lapadat and Lindsay, 1999). Yet, there are no set guidelines for making transcripts except that a rigorous account of all verbal and non-verbal utterances should be recorded (Braun and Clarke, 2006).

Thus, in the current study, transcription was undertaken for the 5 voice recorded interviews and the transcripts were shown to the respective participants for their validation. In the outstanding 10 note recorded interviews, the notes were equally narrated to the participants for validation after the interviews. In both instances, the rephrasing suggested by the participants did not alter any original meanings. Hence, all 15 interviews were either transcribed or note recorded in the order that they were conducted by the investigator and data processing commenced after validity with participants had been established.

During the process of transcribing, initial thoughts and ideas were noted down and the transcribed data was read and re-read several times in concurrence with the

audio recordings (in the case of the 5 audio recorded interviews). This recursive and iterative reading and listening stimulated closeness between the investigator and the data. Furthermore, as transcripts were imported into the NVivo 10 CAQDAS, the initial thoughts and ideas from the data that were identified as pertinent to the broad research questions were recorded using the Memo Function in the NVivo 10 CAQDAS. The memo was named as 'initial thoughts and ideas' and is presented in full in appendix V.

### **5.3 Stage 2: Generation of Initial Codes**

The second stage of thematic analysis involves the production of initial codes from the data. Fundamentally, codes are semantic or latent features that are of interest to the analyst (Braun and Clarke, 2006) and they are 'the most basic segment, elements, raw data or information that can be assessed in a meaningful way regarding a phenomenon' (Boyatzis, 1998:63). Indeed, Strauss (1987:27) asserts that 'the excellence of research rests in a large part on the excellence of coding'. Therefore, in the current study, the codes presented are effectively 'words or short phrases that symbolically assign a summative, salient, essence-capturing and/or evocative attribute' of the transcripts being analysed (Saldana, 2013:3). Importantly, coding in this study is data-driven as opposed to being theory-driven and follows a lateral process of re-reading the transcripts with the intent of tagging and naming extracts of text under various attributes within the NVivo 10 CAQDAS as allowed in qualitative research (Seale, 2000; Keele, 2004). The lateral coding process was completed through the stages depicted in Figure 1.4, thus:

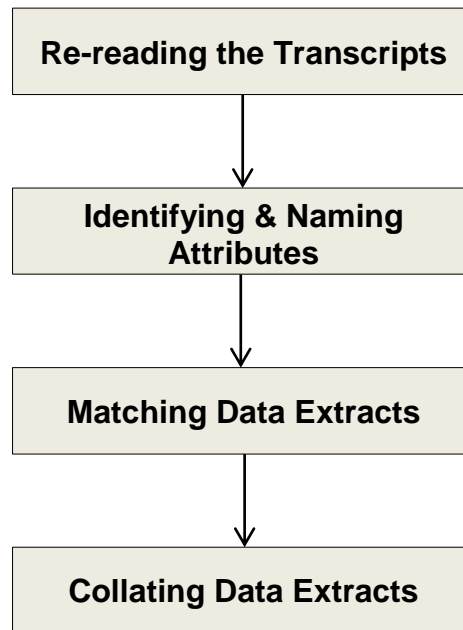


FIGURE 1.4 PROCESS OF CODING IN THIS STUDY

In the course of initial coding, the investigator makes a conscious effort to avoid tagging and naming responses to questions repeated across the data as codes because, as Braun and Clarke (2006:15) warn, ‘some of the worst examples of thematic analysis we have read simply used the questions put to participants as the themes identified in the analysis – although in such instances, there is really not any analysis done at all’. Hence, in order to present the initial codes generated from the transcripts, a careful and rigorous application of the stages in figure 1.4 is now described in detail.

### 5.3.1 Re-reading of the Transcripts

To further strengthen familiarity between the data and the investigator, it is pertinent to review the data at the start of the second phase of the thematic analysis. This is undertaken through line-by-line reading of the transcripts stored in the NVivo 10 CAQDAS and the purpose of this activity is to verify the initial thoughts and memos

in the first phase ahead of identifying and assigning attributes to data in the second phase through tagging.

Thus, in the current study, the re-read data retains a strong semblance with the initial thoughts and memos recorded in the NVivo 10 CAQDAS (as presented in appendices VII and VIII). It is now possible to proceed to the next stage of coding – identifying/naming attributes.

### **5.3.2 Identifying and Naming Attributes**

The identification and naming of attributes has been described as the primary stage of the coding process. Individually, codes represent features of the data that the investigator considers pertinent to the research question. As is intrinsic to thematic analysis, the investigator, once more, re-read and reviewed the whole data set in order for key attributes and repeated patterns not to be missed. Hence, using words and phrases that represent the latent inferences in the entire data set, the investigator classified extracts from the transcripts into 38 codes within the NVivo 10 CAQDAS. Appendix IX shows a screenshot of the codes.

The relatively high number of emergent codes is due to a careful effort by the investigator to ‘code for as many potential themes/patterns as possible’ to capture all extracts that could be of relevance in the latter stages of analysis (Braun and Clarke, 2006:19). During the coding process, the investigator ensured that the data extracts are coded inclusively by tagging surrounding text to retain the context of data within the codes (Bryman, 2001). Also, certain data extracts were tagged in as

many codes as relevant. Table 7 names and briefly describes the attributes of all 38 codes in an alphabetical order, thus:

**Table 7 Code Names and Attributes**

<b>Code Name</b>	<b>Description of Attribute</b>
1. Acceptance of New CRAs	The extent to which respondents resist the entry of new rating agencies into the credit rating industry
2. Ancillary Services	The range of services that CRAs offer to issuers beyond ratings
3. Ancillary Services Firewall	The extent to which the rating and marketing functions are demarcated within CRAs
4. Arbitrage	The extent to which issuers take advantage of rating differentials between two or more CRAs
5. Contact Between Rating Analysts and Underwriters	The level of social interaction between rating analysts and underwriters and the possibility for arbitrage
6. Counterpart Ratings Disregard	The regularity with which rating analysts downgrade bonds with ratings pre-assigned by competitors
7. Dominance of Moody's and S&P	The level of market influence exerted by Moody's and S&P in financial services
8. Exit Ratings - Clause Omission	The absence of the exit rating clause in rating contracts
9. Exit Ratings - Negative	The rate of adverse exit ratings
10. Exit Ratings - No Knowledge Of	The extent of respondents' familiarity to the exit rating clause
11. Exit Ratings - Positive	The rate of enhanced exit ratings
12. Exit Ratings - Purpose	The rationale of the exit rating clause in rating contracts
13. Financial Innovation	The extent to which CRAs depend on new financial products to grow
14. Foreign Perception	The nature of CRAs' image in under-developed

	financial markets
15. Game Behaviour	The regularity with which rating analysts consider the activities/rating of competitors in their decision making process
16. High Demand for Ratings	The volume of debt issues presented to CRAs for rating
17. Inflated Ratings	The underestimation of intrinsic risks in debt pools
18. Notching Complex	The predicament of issuing unsolicited ratings in the guise of investors' interest, or in the interest of potential solicited ratings
19. Notching for (anti) Competition	The extent to which rating analysts downgrade bonds through unsolicited ratings and/or discount counterpart ratings
20. Notching for Risk Levels	The extent to which rating analysts assign ratings to indicate risk disparities of bonds within pools
21. Opportunities for New CRAs	The pathways for new CRAs to develop market presence and influence
22. Opposition to New CRAs	The resistance of respondents to new CRAs
23. Plight of New CRAs	The challenges faced by new CRAs in gaining market influence
24. Power of Big CRAs	The level of market influence exerted by Moody's, S&P and Fitch in financial services
25. Power of Issuers	The level of market influence exerted by debtholders in financial services
26. Prior Knowledge – Inadvertent	The degree to which rating analysts are privy to future debt issuance in the course of diligent risk analysis
27. Prior Knowledge – Lack Of	The degree to which rating analysts are unaware of future debt issuance
28. Rating Analysts' Discretion	The regularity at which rating analysts rate all the bonds within a pool

29. Rating Analysts' Non Discretion	The regularity at which rating analysts rate only selected bonds within a pool
30. Rating Analysts' Justification	The rationale of Analysts' rating of selected bonds
31. Rating Process Participants	The number of parties in the rating process
32. Repeat Business and Continuous Dealing	The frequency of rating requests influenced by existing relationships
33. Rising Competition in Rating Industry	The number of new CRAs in financial services
34. Significance of Fitch	The level of market influence exerted by Fitch Ratings
35. State Intervention	The effect of government regulation on the credit rating industry
36. Telephone Consultancy Service	The offering and receipt of one-off, informal risk assessment services by CRAs to issuers
37. Tying	The occurrence of CRAs conditioning the purchase of ratings on the purchase of other ratings or ancillary services
38. Tying – No Knowledge Of	The degree to which respondents are unaware of 'Tying'

Unsurprisingly, as is usual in qualitative research, some codes in the current thematic analysis were more saturated<sup>42</sup> than others following respondents' feedback. Therefore, the following sub-section describes the process of matching data in the saturated and less saturated codes to densify emerging patterns around the three research questions on notching, tying and the impediments of new CRAs.

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<sup>42</sup> Saturation represents the density of data extracts within the classified codes in the current study.



### 5.3.3 Matching Data Extracts

The matching of data can be described as the gathering of data extracts with identical attributes into a code for further analysis (Braun and Clarke, 2006). Moreover, the gathering of matching data extracts into a code is the process of saturation or densifying a code until no data extracts or new information from the data set has been omitted. Hence, the NVivo 10 CAQDAS makes it possible for researchers to digitally populate codes and visually demonstrate the saturation of codes by displaying a value for the total number of text extracts in various codes as shown in the 'References' column of appendix IX. Even though certain codes are noticeably more saturated than others, it is not advisable to subsume all under-saturated codes into identical and more saturated codes because, as Braun and Clarke (2006) advice, the keyness of a data extract cannot be based wholly on quantifiable measures but also on the importance of what it captures vis-à-vis the main research question. Therefore, in the current study, the matching of data extracts is achieved in the coding process and is illustrated through a tree map generated in the NVivo 10 CAQDAS that compares the volume of data referenced in all 38 codes. Figure 1.5 illustrates this, thus:

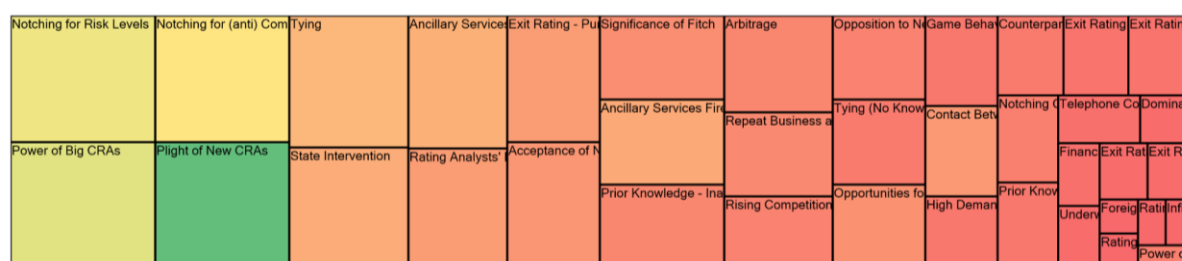


FIGURE 1.5 TREE MAP OF CODES COMPARED BY NUMBER OF DATA EXTRACTS CODED  
(Generated in the NVivo 10 CAQDAS)

In figure 1.5, the tree map illustrates the volume of data extracts that have been matched in all 38 codes. The larger rectangles show a higher number of coded data extracts and the colour scheme separates the more saturated codes from less

saturated ones. In addition to using a tree map to compare the volume of coded data, the NVivo 10 CAQDAS generated a cluster analysis to demonstrate how the codes hang together based on similarities in the coding of data as presented in appendix VI.

### 5.3.4 Collating Data Extracts

In the final stage of coding in this study, the collation of data extracts entailed the demonstration of the number of coded extracts along with the number of transcripts tagged in each code. Once more, this collation was generated in the NVivo 10 CAQDAS and is presented in a descending order in table 8.

**Table 8 Collated Data Extracts**

<b>Codes</b>	<b>Number of Coded Extracts</b>	<b>Number of Transcripts Coded</b>
1. Plight of New CRAs	70	13
2. Power of Big CRAs	42	14
3. Notching for Risk Levels	39	14
4. Notching for (anti) Competition	34	13
5. Tying	22	12
6. Ancillary Services	20	10
7. State Intervention	19	11
8. Ancillary Services Firewall	18	8
9. Exit Rating – Purpose	15	9
10. Rating Analysts’ Discretion	15	9
11. Contact Between Rating Analysts and Underwriters	14	5
12. Acceptance of New CRAs	13	9
13. Opportunities for New CRAs	12	6
14. Significance of Fitch	11	8
15. Repeat Business and Continuous Dealing	10	7
16. Arbitrage	9	8

17. Prior Knowledge – Inadvertent	9	8
18. Opposition to New CRAs	8	6
19. Rising Competition in Rating Industry	8	6
20. Notching Complex	7	4
21. Power of Issuers	7	1
22. Counterpart Ratings Disregard	6	4
23. Tying (No Knowledge Of)	6	6
24. Game Behaviour	5	5
25. High Demand for Ratings	5	4
26. Prior Knowledge – Lack Of	5	4
27. Exit Rating – Negative	4	4
28. Exit Rating – No Knowledge	4	4
29. Financial Innovation	3	2
30. Telephone Consultancy Service	3	3
31. Dominance of Moody's and S&P	2	2
32. Exit Rating – Clause Omission	2	2
33. Exit Rating – Positive	2	2
34. Underwriters' Justification	2	2
35. Foreign Perception	1	1
36. Inflated Ratings	1	1
37. Rating Analysts' Non-Discretion	1	1
38. Rating Process Participants	1	1

In table 8, the first column enlists the pertinent attributes (or codes) in the data set. Next, the second column enumerates the number of data extracts contained in the contiguous codes. Finally, the third column shows a tally of transcripts from which extracts for the codes in the first column have been sourced. Importantly, the key codes related to the impediments of new CRAs and the studied phenomena of notching and tying emerged as the most saturated codes during the collation process and roughly constituted the top 6 – 8 codes in table 8 per number of coded

data extracts. It is now timely to proceed to stage 3 of the thematic analysis process – the search for themes.

#### **5.4 Stage 3: Searching for Themes**

The search for themes begins when data has been fully coded and collated and a long list of codes has been identified across the data set. This phase then ‘refocuses the analysis at the broader level of themes, rather than codes’ (Braun and Clarke, 2006:19) and involves ‘sorting the different codes into potential themes and collating all the relevant coded extracts within the identified themes’ (ibid). Essentially, in this phase the researcher is analysing the codes and considering ‘how different codes may combine to form an overarching theme’...‘some initial codes may go on to form main themes, whereas others may form sub-themes and others still may be discarded’ (Braun and Clarke, 2006:20). The search for themes is concluded by collecting candidate themes and sub-themes along with their data extracts. ‘At this point the researcher starts to have a sense of the significance of individual themes’ (ibid) and nothing is abandoned at this stage because ‘without looking at all the extracts in detail in the next phase it is uncertain whether the themes hold as they are, or whether some need to be combined, refined, separated, or discarded’ (ibid). In the end, the search for themes can be demonstrated in a thematic map as will be shown in this study.

To proceed, the practical search for themes in this study is undertaken by opening and reading all 38 codes stored in the NVivo 10 CAQDAS and creating a thematic map of the main and sub-themes that emerge from this reading. At this point, in order to keep the analysis in firm perspective in the presence of other relevant but divergent codes, it is important for the investigator to maintain a focus on the

specific objectives and research questions of the study around the phenomena of notching and tying and around the impediments of new CRAs. For practical purposes, maintaining this focus is the choice between deep thematic analysis over rich thematic analysis as previously explained in section 3.2. Moreover, existing studies are awash with evidence on the power of the Big Three so it will be redundant to explore codes and develop themes on the subject in this study.

## **5.5 Stage 4: Reviewing Themes**

The next stage of thematic analysis, reviewing themes, involves the refinement of themes and the collapse of certain themes into others or the breaking down of themes into separate subjects (Braun and Clarke, 2006). According to Patton (1990) the data extracts that comprise themes should be internally homogenous and at the same time externally heterogeneous for consistency and exclusivity. To be sure, 'data within themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes' (Braun and Clarke, 2006:20). Thus, this phase of thematic analysis involves two levels of reviewing and refining themes, firstly, at the level of coded data extracts and secondly, in relation to the entire data set (ibid). Hence, stage 4 of thematic analysis in this study is undertaken as described below:

### **5.5.1 Reviewing Coded Data Extracts**

In reviewing themes through coded data extracts, researchers are required to 'read all the collected extracts for each theme and consider whether they appear to form a coherent pattern' (Braun and Clarke, 2006:20). The formation of coherent patterns generates 'candidate thematic maps' that 'adequately capture the contours

of the coded data' (ibid). Thematic maps at this stage are only initial maps that need further refinement. Consequently, the collected data extracts for the themes presented in figures 1.6 to 1.9 below are re-read in pursuit of coherent patterns and the patterns that develop will prompt the modification of 'initial' thematic maps to 'developed' thematic maps in figures 1.10 to 1.13.

Thus, from the developed thematic maps above, the patterns identified in the data extracts for the four themes are summarised accordingly:

#### **5.5.1.1 Developed Theme 1: Impediments of New CRAs**

Firstly, the data extracts show that the factors impeding new CRAs from entering and surviving in the credit rating industry can be classified into the subjects of market barriers, regulatory barriers and internal organisational barriers. Firstly, the market barriers include arbitrage, the issue-pay model and investor preference and loyalty to the Big Three. Secondly, the regulatory barriers identified are discretionary regulation, NRSRO designation and new regulations. Lastly, the organisational barriers encompass down-trading, funding problems, a lack of independence and a narrow product and service scope.

#### **5.5.1.2 Developed Theme 2: Notching for Risks**

Secondly, according to the data, rating analysts simultaneously evaluate debt quality and managerial competence when notching for risks in debt security. The elements of debt quality usually include cash flow projections, liquidity and the estimated recovery rate. The issues in managerial competence are the competence of issuers and structural subordination to corporate ratings.

#### **5.5.1.3 Developed Theme 3: Notching for Competition**

Thirdly, data extracts have shown that when notching is performed to discipline issuers it manifests through punitive and unsolicited ratings and a negative quid pro quo with other agencies. Notching also manifests when rating analysts map ratings or take haircuts on cash flows and allege to protect investor interests by so doing.

#### **5.5.1.4 Developed Theme 4: Tying**

Finally, the keywords articulated by respondents on the question of tying are antitrust and ethical implications as well as the regulatory overdependence on ratings that can lead to tying. Similarly, tying is suggested to be an act of continuous dealing to advance good business relations that may, in fact, be initiated by issuers and not by rating analysts. Yet, the data also suggests that CRAs may practice tying through the provision of ancillary services and the undertaking of negotiations outside the rating process.

In summary, the review of the coded data extracts establishes clear patterns of classification in developed themes 1 and 2 (impediments of new CRAs and notching for risks). For the outstanding developed themes 3 and 4 (namely: notching for competition and tying), the emerging trends are too heterogeneous to be classified into subjects but homogenous enough to 'capture the contours' of the themes (Braun and Clarke, 2006:21). Hence the map of themes 3 and 4 remain unclassified and the related trends are presented as 'sub-themes within the theme' (Braun and Clarke, 2006:22) that 'can be useful for giving structure to a particularly large and complex theme and also for demonstrating the hierarchy of meaning within the data' (ibid). Next, as suggested by Braun and Clarke (2006), a review of the entire data set is embarked on.

### **5.5.2 Reviewing the Data Set**

The second level of reviewing themes in this analysis involves the consideration of individual themes in relation to the data set to confirm whether the thematic map reflects the meanings that are evident in the entire data set (Braun and Clarke, 2006). 'In this phase you re-read your entire data set for two purposes. The first is, as discussed, to ascertain whether the themes work in relation to the data set. The second is to code any additional data within themes that have been missed in earlier coding stages. The need for re-coding from the data set is expected as coding is an ongoing organic process' (Braun and Clarke, 2006:21).

In the current analysis, the data set is re-read within the NVivo 10 CAQDAS and is judged by the investigator to be representative of the developed themes and a further confirmation of the initial memo in appendix V. Also, no additional data with sufficient significance to warrant the refinement of the developed thematic maps are coded during this process. Therefore, 'if the thematic map works, you move to the next phase' of thematic analysis (Braun and Clarke, 2006:21). As the developed themes now provide an overall story of the data, this analysis proceeds to stage 5 of thematic analysis namely: the defining and naming of themes.

### **5.6 Stage 5: Defining and Naming Themes**

At this stage of thematic analysis, the themes to be analysed are further refined by analysing their inherent data (Braun and Clarke, 2006). The defining and naming themes is not yet the analysis of data but assists the investigator in further 'generating clear definitions and names for each theme' (ibid:35); it entails



‘identifying the essence of what each theme is about’ and ‘what aspect of the data each theme captures’ (Braun and Clarke, 2006:22). This process is carried out by revisiting the collated data extracts for each theme and organising them into a narrative that is coherent and consistent (ibid). Similarly, Wang and Park (2016) attest that the findings section in qualitative research should report the overall trends across participants and how their narratives answer the research questions. Indeed, stage 5 of Braun and Clarke’s (2006) approach to thematic analysis could be referred to as the results section of qualitative analysis and the essence of this phase is to articulate the peculiarity of the findings within each theme as they relate to the research questions.

Hence, in order to define and refine the themes in this analysis, the current study will identify the story that each theme tells by presenting data extracts that demonstrate a demarcation between the themes. In this regard Braun and Clarke (2006) urge researchers to ensure that there is not too much overlap between themes. Recalling that this phase entails collating data extracts for each theme and organising them into a coherent and internally consistent account with accompanying narrative, the following sub-sections 5.6.1 to 5.6.4 will define and demonstrate the importance of the 5 candidate themes by way of findings.

#### **5.6.1 Findings: The Impediments of New CRAs**

This theme captures the factors that restrain new CRAs from entering or surviving in the credit rating industry. The various factors identified in stage 4 of this thematic analysis have been classified into three subjects of market barriers, regulatory

barriers and organisational barriers. For clarity, the definitions and essence of these subjects and their importance to the main theme are now presented separately.

#### **5.6.1.1 Market Barriers**

A barrier to entering any market can be defined as ‘a cost of production for an entrant that is not incurred by already established firms’ (Spulber, 1989). Thus, the market barriers discerned in this study could be understood as costs not incurred by the Big Three as follows:

- **Deal Breakers**

Participants in this study suggest that new CRAs are a hindrance to the issuance of debt securities by being ‘deal breakers’ as opposed to being the ‘deal makers’ that the Big Three are. Understandably, issuers and the underwriters that represent them have an interest in issuing debt with the least scrutiny from rating analysts but with the highest acceptance from potential investors. In this vein, Respondent B<sup>43</sup> thinks that ‘in terms of a welcoming market, the market wants a rating agency that helps them do more deals’ and even though ‘my little firm has specific methodologies to address that problem...we are not able to get a role...I think it is indicative of the power of the market’. Similarly, Respondent D<sup>44</sup> yields that ‘traders are used to using certain rating agencies and they are looking for the least resistance’. What this deal breaking notion implies is that new CRAs are disadvantaged because of their smaller size. Also, through their different methods, new CRAs enact a degree of scrutiny and analysis that is at least different, or at most more

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<sup>43</sup> Respondent B in the Rater category is an Ex-Moody’s Analyst and Partner at a new CRA

<sup>44</sup> Respondent D in the Rater category is an Ex-Moody’s Analyst

thoroughgoing, than the process issuers and their underwriters experience with the Big Three. Another explanation for this is habit formation as Respondent K<sup>45</sup> explained that:

my job is easy if all CRAs follow the same standards, methodology and rating scale. It does not matter how many there are in the market, we market participants just do not want to be confused by too many systems.

Therefore, Underwriters are uncomfortable with extra scrutiny from new CRAs and their methods and view their established counterparts as more friendly and willing to make a deal. This occurrence is essential to the main theme because it underscores the attitude of Underwriters towards new CRAs and provides insights into perceptions on the small size, habit formation and duplication of services that seemingly position new CRAs as disablers instead of enablers of debt issuance.

- **Arbitrage**

There is an argument among respondents that new CRAs are impaired by rating disparities during the rating process. By definition, arbitrages in financial markets are opportunities to make a profit by finding and exploiting price anomalies or fluctuations. In the context of ratings, arbitrages are opportunities sought by issuers to swap one CRA for another by the tranches in a pool for the sole purpose of lowering the cost of debt issuance for each tranche. On arbitrage in the rating process Respondent F<sup>46</sup> retorts that:

you would go to another rating agency that you can cut a deal with and they would assign an investment grade rating on those lower rated tranches. So

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<sup>45</sup> Respondent K in the Rated category is an Underwriter serviced by Moody's, S&P and Fitch

<sup>46</sup> Respondent F in the Rater category is an Ex-Moody's Analyst and Partner at a new CRA

you have a kind of arbitrage, you can have an investment grade from Fitch and you can have a nice, you know, respectable rating from Moody's on the A tranche, which is the one that is by far the largest. So that is the motivation – arbitrage.

With respect to the lower tranches that provide arbitrage opportunities, Respondent H<sup>47</sup> thinks that:

investment banks know people who want to buy those tranches and the people who are willing to buy them have a much rosier outlook than the credit rating agency is going to hand out and they do not want to show those clients that rating.

Similarly, Respondent N<sup>48</sup> stresses the dangers of this trend because 'it could distort the natural pattern of things and the market is like a pack of cards, an arbitrage or bad practice in one area can make the whole sector collapse'. In the current study, this trend is crucial to the main theme because it sheds light on the occurrence and negative perception of arbitrage by market participants.

- **Economic Rents in London and New York**

In the contention of respondents, another trend that impedes small CRAs is a lack of influence in financial centres where their bigger counterparts thrive (mainly in London and New York). As a concept, economic rent refers to income received as payment above the factor cost of inputs. They are benefits that may even accrue from the passive ownership of a resource as opposed to an active effort or investment (Duff, 2010). Therefore, about two-thirds of respondents reason that the predominance of the Big Three in the world's

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<sup>47</sup> Respondent H in the Rated category is an Underwriter serviced by Moody's

<sup>48</sup> Respondent N in the Rated category is a Portfolio Manager with assets rated by Moody's and S&P

leading financial centres has impeded the growth of new CRAs that are deprived of economic rents. Respondent H articulates this incidence thus:

When international investors want somebody to trust and they want to put their money someplace safe, they go to London or New York, they just do. I guess that means Moody's, S&P and Fitch.

In recognising the Big Three's high economic rents, Respondent D asserts that:

it is so for a couple of reasons, first of all they had first mover advantage and secondly they took advantage of the opening up of the capital markets, they just got a head start'.

In defining the main theme on the impediments of new CRAs, this trend is important because it lays emphasis on a tacit market barrier that challenges the entry of new CRAs.

- **Investor Preference and Loyalty to the Big Three**

Possibly, the biggest factor impeding new CRAs, according to respondents in this study, is investor's strict and unconditional loyalty to the Big Three. In the words of Respondent L<sup>49</sup>, in the selection of CRAs 'the factor that weighs the highest is investor preference, whether they are actual investors or intended investors'. Respondent E<sup>50</sup>, a rating analyst, acknowledges that:

the investors want to see Moody's and S&P because of habit...I had debates with a number of people about this in terms of saying, well, would it not be better if the issuer just published its own opinion and explained how it arrived at it and they said no, we want to see an S&P and a Moody's rating as well.

However, for some investors still, loyalty is shown only to the big two as

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<sup>49</sup> Respondent L in the Rated category is an Underwriter serviced by Moody's and S&P

<sup>50</sup> Respondent E in the Rater category is an Ex-S&P Analyst

Respondent G<sup>51</sup> contends that ‘there are only two worthwhile CRAs, Moody’s and S&P’. Nevertheless, Respondent H maintains that:

the reason that Moody’s, Standard & Poor’s and Fitch dominate the rating industry is not because they are so good and not because they are so smart but because people like them better than who they compete with.

In addition, Respondent H believes that ‘they [the Big Three] have a really impressive track record of saying whether something was investment grade or not’. Thus, this trend is essential to the main theme because it highlights a profound and market-wide reluctance of investors to commission new CRAs which constitutes a tacit barrier to market entry.

- **Issuer-Pay Business Model**

Respondents report that the prevailing arrangement in which issuers and not investors pay for ratings to be a significant barrier to new CRAs trying to develop their business. Respondent M<sup>52</sup> voices that ‘rating fees are already high for issuers to pay for three’; this suggests that the cost of appointing new CRAs instead of the Big Three is a redundant expense that only increases the transaction cost of debt issuance. For Respondent G, it would be acceptable to have alternative CRAs but only if they are ‘cheaper to deal with’. However, this may also signal lower quality. By these indications, the payment model championed by the Big Three deters issuers who may want to consider appointing a new CRA, as Respondent D remarks that ‘I just think that the business model itself is flawed...getting the people with the deep pockets to

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<sup>51</sup> Respondent G in the Rated category is an Underwriter serviced by Moody’s, S&P and JCRA

<sup>52</sup> Respondent M in the Rated category is an Underwriter serviced by Moody’s, S&P and Fitch

buy these ratings is going to be a challenge<sup>53</sup>. In the same vein, Respondent L concedes that 'investors will need some convincing because it is fundamentally their decision whether or not to welcome new CRAs'. The claims of equivalent rating fees are supported by Respondent F<sup>54</sup>, a rating analyst at a new CRA, who asserts that:

our quality is unique so we do not say we would give you a cheaper price because we are just going to spend half an hour on your deal. It is either we do it well or we do not do it. And if we do it then we have to charge what we charge.

This trend is important to the main theme because it stresses a monetary disincentive for issuers and their underwriters to appoint new CRAs which in turn acts as a barrier to market entry. New CRAs insist on quality and therefore charge a high price, but the Big Three already offer quality at an acceptable price.

The current trend concludes the presentation of market barriers impeding new CRAs. In turn, the regulatory barriers within the same theme are now presented.

#### **5.6.1.2 Regulatory Barriers**

In addition to market barriers driven by the activities of market participants, respondents have cited regulatory barriers prompted by the activities of government-backed agencies to be an impediment to new CRAs. Specifically, the cited trends are discretionary regulation, new regulations and NRSRO designation and they are hereby defined with the aid of data extracts.

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<sup>53</sup> Respondent D was inferring that high-net worth investors are not incentivised to recognise new CRAs

<sup>54</sup> Respondent F is also a former Moody's Analyst

- **Discretionary Regulation**

Some respondents reason that the lack of regulatory pressure on issuers to appoint new CRAs in the rating process also creates a market barrier. Respondent H articulates that ‘the reason you do not see any new rating agencies is because none are needed and the reason none are needed is because it is not the law’. In the same way, Respondent G commented that ‘the regulation encourages the use of an emerging CRA but it isn’t mandatory so we do not have a commercial or regulatory incentive to use them’. This is interesting because, typically, regulatory intervention is informed by market failure or moral hazard as observed in the 2008 financial crisis. The importance of this trend to the main theme is intensified by the seeming but redundant efforts of public agencies in Europe and the US to generate more competition through regulation.

- **New Regulations**

One Respondent reasoned that the development and enforcement of new regulations in the rating industry is in itself a barrier to new entrants. The respondent (E) argues that:

for financial institutions, the banks, insurers, fund managers etc. The entire thrust of legislation and regulation over the past decade has been for them to have their own internal opinions and that also makes the rating agencies much less important in the future.

In other words, a reduced dependence on the opinions of rating agencies across the board in the medium to long term will constrain the volume of rating business available to new CRAs. The trend is important to the main theme



because it highlights the conflictual paradox of new regulations aiming to generate competition but reduce the reliance on ratings at the same time. It is not clear whether this ambidextrous objective, an increase in competition and a reduced reliance on credit ratings, can be simultaneously achieved.

- **NRSRO Designation**

The last regulatory barrier mentioned by respondents is the NRSRO certification that is mandated by the SEC. Respondent F states that the stringent requirement for NRSRO status proves that ‘the SEC does not really allow anyone into the industry’. In a similar vein Respondent B<sup>55</sup>, a partner at a new CRA, explains further:

in order for the market to accept you, you have to be designated by the SEC, otherwise you simply do not count. I have seen governments intervene by stifling competition. When we applied for NRSRO designation in 2011, we met all the criteria and I believe we were actually the only ones who met all the criteria, except for one, which was that you needed to have 10 letters from qualified institutional bodies and we had 9. It takes a long time to get 10 and at the time we were generating about 2 or 3 a year and clients have the option to say no and they will say no because they do not want the SEC to come back and do something to them.

The excerpts above from Respondents F and B illustrate the evidential inflexibility of SEC’s recognition criteria and the difficulty of attaining NRSRO status. The importance of this trend to the main theme lies in the power of the SEC to set the tone for the acceptance or rejection of new CRAs across the

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<sup>55</sup> Respondent B is also a former Moody’s Analyst

sector.

This trend concludes the presentation of regulatory barriers impeding new CRAs. In turn, the organisational barriers within the same theme will now be defined with the aid of data extracts.

#### **5.6.1.3 Organisational Barriers**

Having defined the market and regulatory barriers, respondents also make references to impeding organisational factors that are common among new CRAs.

These factors could also be described as institutional and they include down-trading, funding, resource and system deficiencies, limited geographical spread, a lack of independence and added intellectual value, as well as a narrow product and service scope. The aforementioned factors are separately defined as follows:

- **Down-trading**

More than seven respondents suggest that new CRAs are relegated to providing fringe analytical services instead of rating services during the rating process. Respondent B, for instance, discloses that:

people may turn to us to help them get deals into the market so we play a kind of consultant role where we help to structure the deal...it is a time consuming process but we do that...Egan Jones has not really developed a commercial rating business. They have a commercial business but as a rating agency they do not have much influence.

Furthermore, on Egan Jones, Respondent H cites that 'it [Egan Jones] does proxies and not really credit ratings'. At other times, new CRAs are relegated to rating the subordinated tranches of bond issues while the superior tranches are reserved for the Big Three. In this regard, Respondent F reveals that:

if somebody says, well, I do not want to pay you for all three securities, A, B and C, and he is looking for a rating for B, this happens, then we can only charge money for B because they do not want to pay for the others. So we have to do the others but we do not get paid.

Yet, the overlapping nature of assets within the same debt pools means that security B could not be rated in isolation of securities A and C. The essence of this trend to the main theme is a diversion of rating resources at new CRAs to the extent that they undertake unpaid work and/or offer non-rating services that forestall their influence in the core ratings sector.

- **Funding, Resource and System Deficiencies**

Four Respondents are of the view that new CRAs lack the financing as well as physical and intellectual assets to be influential in the rating industry. On funding deficiencies, Respondent D reports that:

unless someone has a huge amount of money, I do not see how they can fund the investment to try to make a significant inroad with the Big Three...for smaller CRAs to grow internationally it is going to require some very significant investment and I am not sure if the return on that is clear.

Similarly, on resource and system deficiencies, Respondent M notes that 'some of the new agencies in Europe are only as good as an audit firm. They need a lot more sophistication and competence'; and, 'we may risk accurate ratings unless these new agencies can prove themselves from day one' agrees Respondent J<sup>56</sup>. To further stress the point, Respondent M reports that 'I once

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<sup>56</sup> Respondent J in the Rated category is an Underwriter serviced by S&P

tried to make contact with an agency that was supposed to be the best in Bulgari but it was a waste of time even though there were registered by ESMA’.

The importance of this trend to the main theme is captured profoundly by Respondent L who indicated thus that ‘is logical to have more agencies but at the same time you want to guarantee the integrity of ratings or else we will end up with a race to the bottom’. Moreover, respondent L continued, in selecting CRAs ‘we would consider the technical sophistication in terms of the actual rating method, available time, available resources on our side and their side’. The verdict is that new CRAs lack the threshold resources needed to attract and retain rating business.

- **Geographical Spread**

The majority of participants draw attention to the sparse presence of new CRAs in financial locations when compared to their established counterparts. Understandably, financial institutions and serial issuers of debt operate transnationally and require consistency of service across the board beyond the scope which new CRAs are able to offer. In comparison, alluding to the power of the Big Three’s geographical spread, Respondent G thinks that:

the main thing for me would be their global market presence and the intelligence thereof that comprise their ratings, this is where I think Moody’s and Standard and Poor’s have an edge over others. They have greater intelligence and spread in numerous markets.

In a similar vein Respondent D, who already stated that ‘for smaller CRAs to grow internationally it is going to require some very significant investment’, adds that:

I think we should get some consolidation, or some kind of partnerships working. I know there is a rating agency called Arc Ratings which has been trying to create a global network of rating agencies drawing on some regional ones. I am not sure how that is going to work but there is something like that. The above statement is supported by Respondent C<sup>57</sup> who yields that 'S&P and Moody's dominate the industry in what I call the important markets'. Equally, Respondent E expresses that 'my impression is that in North America in particular there is still very much a dominance of the Big Three'. In due course, the importance of this trend to the main theme is the recognition of facility and access restrictions that impede new CRAs from entering the market.

- **Lack of Added Intellectual Value**

Another organisational barrier that impedes new CRAs is a lack of product differentiation through added intellectual value beyond that which the incumbents are able to provide. Respondent F observes that:

there are a few new entrants that are trying to make their name but always using the same methods...they are marginal players with some very depreciated assets, methods and procedures, so there is no real change in the paradigm.

Nonetheless, where new CRAs are as competent as the Big Three, Respondent K ponders that 'the problem is whether they offer anything different. It is not yet obvious'. In contrary to new CRAs, Respondent B reasons that the Big Three have flourished because of the rating ideas that they developed over time and argues thus:

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<sup>57</sup> Respondent C in the Rater category is an S&P Analyst

They [the big three] actually keep business based on their methodologies and their ideas. If they have good and strong ideas then they have staying power in the market. Individuals cannot give a rating agency the kind of staying power that good rating ideas can.

Besides, Respondent B adds that ‘I do not believe that the market wants new players, unless they have something of value to offer’. Thus, this trend is important to the main theme because it pinpoints the importance of product/service differentiation to defusing the existing market structure of the rating industry.

- **Lack of Independence**

One of the qualities of good ratings is the independence of the institution providing the ratings. However, participants in this study suggest that new CRAs lack this fundamental quality of independence and are a risk to the integrity of ratings. This is illustrated by the argument put forward by Respondent C, thus:

I know that ESMA has an agenda to increase the number of CRAs and on paper some of the new CRAs look great until you visit their websites or their offices. Your gut feeling tells you that they lack many things including basic processes and independence. It will not be long until some of them are found out.

A possible means for measuring the independence of both old and new CRAs is perhaps the interface between ratings and the other services and the conflicts of interest that may ensue from this. It is evident from the data that established CRAs have a clear separation of rating services from other services

as verified in this statement by Respondent E:

there tended to be, certainly on the rating side, a sort of firewall between those who market and sell the ratings, so to speak, and those who actually carry out the rating analysis.

On the contrary, it would seem that new CRAs lack the staff strength to demarcate rating services from other services. Particularly, when asked about jointly offering ratings and advisory services, Respondent B, a former Moody's employee and now a partner at a new CRA, responds:

yes we do. And we do not see anything wrong with that. We think that the crux of good risk management and good asset management more importantly is using a fully articulated, transparent and internally consistent system. And that system should be able to address multiple issues and so driving risk one way on one system and a different way in another system, - that is wrong. But if you have a system that is very flexible, it allows you to use different parts of the system for different tasks.

Although the above response is a plausible one, it confirms that through their personnel strength and related resources, incumbent CRAs can make a greater investment towards analytically independent systems much more than new CRAs can. This trend is important to the central theme because it highlights a lack of confidence in new CRAs among market participants.

- **Narrow Product and Service Scope**

Lastly, on organisational barriers, the data suggests that the limited range of services offered by new CRAs is a factor that impedes their development in the market. Respondent M makes a point that 'I know of new CRAs in Europe but

many of them provide only a narrow range of rating services which makes them limited to contract'. Similarly, Respondent I<sup>58</sup> thinks that 'the other [new] credit rating agencies do not provide ratings for all types of instruments like Fitch, Standard and Poor's and Moody's do'. In agreement, Respondent D further summarises these views by stating:

it would be interesting to see in five years from now how many of the new players in Europe are still around because I think the product itself is too narrow and they try to create a niche for themselves but to be honest with you, I am not sure that niche is really a valid one. It is not viable, if I was running one of those niche CRAs I would be looking to merge with somebody and take it from there. This is not a criticism, I find that the quality of the analysis is generally good in most of the new CRAs, it is just that the market is small and I think it is getting smaller.

Indeed, the size of the market and the range of services that can be offered are critical to upsetting the market structure. Thus, on new CRAs, Respondent M ponders 'how they find business to survive, or if they have any business at all'. This trend is important to the main theme because, in the first instance, it explores the capacity of the market to accommodate new CRAs.

The current trend concludes the findings on the impediments of small and new CRAs. The analysis will proceed to explore findings on the next theme of notching for risks.

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<sup>58</sup> Respondent I in the Rated category is an Underwriter serviced by Moody's, S&P and Fitch



## **5.6.2 Findings: Notching for Risks**

Data extracts in stage 3 of the current thematic analysis (the search for themes) indicate that notching may be carried out for purposes of risk assessment or in the interest of competition. The current theme captures the former and focuses on factors that rating analysts consider when assigning notched ratings on the basis of inherent bond risks or exposures. The factors identified in stage 4 of this thematic analysis on notching for risks are classified into two subjects of debt quality and managerial competence. The definitions and essence of these subjects and their core factors to the main theme are now presented separately:

### **5.6.2.1 Debt Quality**

The subject of debt quality groups together data extracts that describe the value or worth of debt issues. These extracts are summarised as factors that include the cash flow or cash cycle, the first loss piece, liquidity, loss given default and recovery rate. Together, they comprise the dimensions for debt assessment during the rating process. These factors are now described below:

- **Cash Flow/Cycle**

Three respondents in this study indicate that notching may arise due to varying cash flow assumptions between agencies. Respondent K affirms that when ratings are different ‘most of the time the reason could be cash flow’. Similarly, Respondent B confirmed that ‘something I do in securitisation is the cash cycle and I would make an assessment of the performance of the receivables of the company’. The purpose of making cash flow assumptions is, in the words of Respondent C, ‘you run the cash flow model to determine how the tranches can

absorb defaults'. Therefore, this trend is important to the main theme because it highlights an assumption on a variable that may lead to notched ratings.

- **First Loss Piece**

The majority of participants in the study indicate that notching arises from the allocation of subordinate debt tranches to new/smaller CRAs for rating, while superior tranches are allocated to the Big Three. To be sure, Respondent F reports that 'usually, the senior rating agencies, the most famous one, would be asked to rate the most senior security'. According to Respondent O<sup>59</sup>, this is because:

investors will expect AAA or AA ratings for senior tranches and any of the investments grades for junior tranches. We may not even bother rating the most junior tranches, this is why we call them the first loss piece but they do pay better interest because of the greater risk exposure.

The logic of subordinate tranches or first loss pieces being notched is understandable because, as Respondent H noted, 'often the first loss position are sometimes the riskiest positions in a very big pool to be rated'. To clarify the presence of first loss pieces in debt pools and their susceptibility to notching, Respondent I explains that:

subordinate tranches will usually yield lower ratings when compared to senior tranches. In fact, the most subordinate of tranches are often not rated at all. The issuers set out to obtain investment grade ratings for senior tranches and non-investment grades for the junior ones, it is risky of course

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<sup>59</sup> Respondent O in the Rated category is an Underwriter serviced by Moody's, S&P and Fitch

but investors will take a chance because of the high yield of the junior tranches or the first loss piece as they are called.

This trend is important to the main theme because it indicates how the allocation of risks within a debt pool and the procurement of ratings from various CRAs may lead to notched ratings or downgrades in the rating process.

- **Liquidity**

Liquidity denotes the rate at which an asset can be converted into cash without a negative effect on the asset's value. Even though only two respondents alluded to 'liquidity' as a factor of debt quality, this trend suffices because of its keyness in understanding the main theme on notching for risks. According to Respondent N, 'notching is necessary if it is done to signify mixed liquidity within a bond structure'. By the same token, in the assessment of debt pools, Respondent B affirms that 'I would have a method that involves looking at the 5 dimensions of performance – asset quality, leverage, management, liquidity and cash cycle'. The essence of this trend to the main theme rests in the variable liquidity of tranches in debt pools and the prospect of resulting rating spreads being interpreted as notching.

- **Loss Given Default and Recovery Rate**

The loss given default could be understood as the amount of deposits that investors stand to lose should issuers default on a loan. Similar to the liquidity factor, the loss given default constitutes a key dimension of risk assessment that respondents indicate as key in the rating process. Particularly, Respondent E intimates that:

Looking at a transaction, we would look at the loss given default characteristics of that, the unsecured ones we would have to have a look through into the security itself and whether that security gave any security for the probability of default on that asset or not and secondly, in terms of what the loss given default characteristics would be of that particular asset. So from a loss given default perspective, which would tend to be the key driver here, it is a question of ensuring that the theoretical priority for settling debt in terms of the default are actually going to work in practice and what benefit that cushion will give.

This finding corresponds with the conventional understanding of loss given default as the proportion of an asset that investors may lose in the event of an obligor defaulting. Along with the loss given default, respondent also alluded to recovery rates, that is the amount of principal and interest that can be regained from defaulting assets and some respondents indicated that assumed recovery rates may create room for implied notching. According to Respondent I:

rating agencies have an assumed recovery rate for modelling the cash flows of secured and unsecured bonds. The assumed recovery rate is a standard percentage and it could be anything between 40 – 60%.

Correspondingly, Respondent F reasons that:

unsecured exposures would have lower recoveries if they do default so the rating would not be the same but it doesn't change the method, you just change the recovery rate.

In other words, unsecured bonds would generally have lower ratings due to their lower recovery rates when compared to secured bonds.

The current trend concludes the findings on debt quality under this theme. The essence of this trend to the main theme lies in the variable loss given defaults of tranches in debt pools and the prospect of variable ratings that may be misconstrued as notching. The implication of this trend to the main theme also lies in the variable recovery rates of secured and unsecured tranches and the ensuing difference in ratings that may imply notching. The analysis will proceed to explore the subject of managerial competence under the same theme of notching for risks.

#### **5.6.2.2 Managerial Competence**

In addition to debt quality, some respondents hint at certain management factors that are considered in the assessment of debt quality during the rating process. The factors under this subject are the more human elements of issuer profiling and structural subordination as explained below.

- **Issuer Profiling**

Similar to the liquidity factor in this theme, only one reference to issuer profiling is found in the data. Nevertheless, the keyness of the trend to the research question requires its exploration. Respondent B enlists the management of the issuer as one of the 5 dimensions of debt performance and hints at operational assessments that could lead to rating disparities, hence to implied notching. For example, the assessment of obligors' debt collection processes is a subjective one and rating analysts make informed assumptions about management processes and systems to carry out their analysis. Hence, in assessing the soundness of issuers' management Respondent B indicates that:

I would do as many things as I could, I would play as many mind games as I could to try to get reasonable inputs, because obviously people have a vested interest on the other hand, of giving you inflated inputs. But once I had the input, the methodology was standard, I would run a cash flow analysis, then I would do a Monte Carlo analysis simulation.

Largely, the importance of this trend to the main theme rests in the subjectivity of management assessments of issuers during the rating process that may lead to rating discrepancies and therefore inferred notching.

- **Structural Subordination**

To round off this theme on notching for risks, the trend of structural subordination alluded to by respondents may result from either risk allocation between secured and unsecured debt, or from the ownership structure of the obligor. In this study, three respondents make reference to both kinds of subordination as they describe the benchmarking of structured ratings against corporate rating in the rating process. As such, according to Respondent L:

the less contentious notching is for subordination on the basis of risk exposure where the rating agencies make rating distinctions for risks in the ratings that they assign. I am in support of this.

In the same vein, Respondent B states that:

in a standard analysis, a secured situation usually involves notching, you know, one or two notches above the corporate rating and I have to bear in mind that if it is a corporate rating then you have to give something like that but if it is a structured rating then the investors have immediate access to the assets in a bankruptcy situation so the ratings would be quite different.

Similarly, Respondent E indicates that:

My understanding of notching, from S&P, is where there may be something rated single A, or the obligor is rated single A and you might rate a particular issuance A- or even BBB+ based on - it could be structural subordination, it could be non-material incremental probability of default, that sort of thing.

To this end it is typical of CRAs to benchmark structured ratings on corporate ratings to accommodate the dependency of financial instruments on institutional solvency. To conclude, this trend is fundamental to the main theme because, firstly, the data extracts demonstrate the presence of notching practices for the purpose of signalling risks; secondly, data extracts evidence the benchmarking of ratings to the solvency of obligors.

The results on structural subordination conclude the findings under the theme of notching for risks. This chapter will proceed to explore the theme on notching for competition.

### **5.6.3 Findings: Notching for Competition**

Once more, data extracts in stage 3 of the current thematic analysis (the search for themes) indicated that notching may be carried out for purposes of risk assessment or in the interest of competition. The current theme captures the latter and focuses on factors that rating analysts consider when assigning notched ratings on the basis of other information in addition to risks. The factors identified in stage 4 of this thematic analysis remain unclassified because, as previously explained, the emerging trends are too heterogeneous to be classified into subjects but homogenous enough to capture the contours of the theme. Specifically, these

trends in their order of presentation are haircuts and mapping, investors' interest, punitive ratings, quid pro quo and unsolicited ratings.

- **Haircuts and Mapping**

In the process of assessing bonds with counterpart ratings, rating analysts consider haircuts to be differences in assumptions based on cash flows, principal payments and interest payments (Masson, 2007). Therefore, in the assessment of debt pools with counterpart ratings, Respondent E explains that:

I would want to check the mappings in terms of default probabilities for sure between my own agency. If I was S&P, between S&P and Moody and there are differences, so it may be for example that a B+ rating by Moody's, I might put in as a B by S&P.

In other words, through a mapping process, it is normal for counterpart ratings to be downgraded by at least one notch. More to the point, Respondent B confirms that 'I have come across pools where they have got two ratings from Moody's or Fitch and I have adopted a mapping approach'. In knowing that small CRAs are more likely to be mapped, Respondent B further indicates thus:

I think they look at our analysis and they just take haircuts on our cash flow assumptions. Their assumption is that we are going to be too generous because we are hired by the clients but in fact that is not true, we are not generous.

To corroborate and attest to this practice, Respondent N reasons that the process of taking haircuts and mapping is commonplace among CRAs and as a form of notching 'it can be seen as a way of extorting business from issuers by CRAs'. In addition, Respondent N concludes that 'it happens in many hidden ways and I do not think that any of the leading CRAs is any more saintly than



the others'. This trend is important to the main theme because it evidences one of the various forms that notching may take to restrict competition in the rating industry.

- **Investors' Interest**

The data extracts suggest that CRAs often issue ratings solely on the basis of publicly available data as opposed to internally gathered information offered by issuers. According to most respondents, the justification for this is to protect investors from unscrupulous obligors notwithstanding the assignment of ratings by other CRAs. As a result, ratings based on publicly available material tended to be downgrades from solicited ratings and Respondent I captures this incidence when explaining thus:

I know that controversy has been created by this in the past as it looks like an automatic downgrade because Moody's and S&P will lower ratings by up to three or more notches if they are in a pool and have not been rated before. You could understand the controversy. My take on the issue is that the instruments should be rated to determine a rating instead of automatically assuming a lower rating. But that's too much work for the agencies so they have a standard procedure which they say is in the interest of investors.

Equally, Respondent D believes that:

the motivation for making unsolicited ratings was that the rating agency was looking out for the interest of the investors rather than the issuers and so there could be a situation where the investors wanted certain institutions rated, that was the motivation. I think it was not issuer friendly but it was investor friendly. The number of institutions who returned to purchase solicited ratings after receiving unsolicited ratings was fairly high when I was in Asia. I would say

probably 90%. However, they didn't always receive ratings higher than their unsolicited ratings, absolutely not. It depended, there was no guarantee to receive higher ratings even after further information was provided.

The significance of this trend to the main theme is a confirmation of notching practices undertaken in the guise of protecting investor interests, whether genuinely or disingenuously. On the consequence of this, Respondent E discloses that:

Some companies would later switch from unsolicited ratings to a full paid-for rating. If it came out the same or worse than the unsolicited rating then they tended not to publish.

As a trend, this incidence has the potential to impede new players in the rating industry if it discounts their ratings and pushes issuers toward the Big Three.

- **Punitive Ratings**

Akin to investor interests, data extracts from the interviews also evidence CRAs' issuance of punitive ratings that are supposedly intended to attract or retain clients. The thoughts of Respondent L confirm this and states that:

there is inhibitive notching that punishes issuers for choosing a new rating agency. I feel it is wrong to give mixed signals to the market by essentially publishing unsolicited ratings.

In explaining how issuers are attracted to purchase rating services, Respondent B, a former Moody's employee, states that:

here is what happened. The market hated Moody's at the time, they hated Moody's because they felt that Moody's was bossy, that they were arrogant. It was almost a personality thing and when I joined Moody's in Asia I realised that Moody's had a double standard, they said one thing to the US market and

they did what they said. But in the Asian market they did not do what they said, they were more punitive.

Supporting Moody's tendency to issue punitive ratings, Respondent F, also a former Moody's employee, confers that:

their way at Moody's was to notch people down if their rating was not a Moody's rating and if, let's say, they had a security rated by Fitch, then they would say would you like this security rated by Moody's? Which of course means would you like to pay a fee? If the answer was no, well we have a rating by Standard & Poor's or Fitch, they would say yes you do but unfortunately they are not as good as we are, so I am going to reduce the rating because I want to be conservative.

Therefore, there is a suspicion of hidden motives in punitive ratings as, in the opinion of Respondent H, punitive ratings are real and uncalled for because 'they are trying to financially damage you on purpose and the reason they are doing it is because they want to get paid'. By and large this trend is important to the main theme as it evidences the use of unsolicited downgrades as a vehicle for market development to the disadvantage of fringe or new competitors.

- **Quid Pro Quo**

There is evidence in the data to suggest that the notching of counterpart ratings is a reciprocal affair between the big two at least. Respondent A<sup>60</sup> reasons that 'everybody gets notched by everybody...we only try to provide a statistical explanation when we notch our counterparts and I wish others will do the same'. Likewise, Respondent F is adamant that:

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<sup>60</sup> Respondent A in the Rater category is a Moody's Analyst

Standard & Poor's did the same thing [notching counterpart ratings] as Moody's, oh yes. Maybe they did one notch and Moody's did two notches. In the common world this is called blackmail but in the rating industry this is called notching. This is a common practice that is totally disclosed above board and that I probably did not disagree with in that moral sense. It was a common practice, a commonly understood practice and perhaps it was disliked because a lot of the time the people on the receiving end of this was Fitch.

To the mind of Respondent B 'if you are notching on an alphanumeric scale then it is just a political negotiation, it has no numerical content because structured finance is intrinsically numerical'. This reciprocal practice could be understood as a game theory behaviour in which CRAs condition their ratings on rivals' existing or expected ratings and activities. Respondent A converses that 'I also wouldn't think that S&P, for example, will routinely adopt our ratings'. The danger of this practice is summed up by Respondent J, an underwriter who represents issuers rated by both Moody's and S&P. The respondent maintains that 'we deal with Moody's and S&P on a consistent basis anyway, so it would not be in their long term interest to notch us even if they wanted to'. This may suggest that CRAs prioritise commercial gains over rating quality.

The implication of this trend to the main theme is the possibility of arbitrage to sustain the market structure while encumbering new entrants that have no market clout to reciprocate notching. As Respondent B affirmed, 'I think that notching produces not a barrier to entry but it actually introduces constraints on how the market works. It changes the economics'. Therefore, owing to the

danger of arbitrage, this reciprocal practice of notching is a key factor in the current theme in a bid to understanding the strategic behaviour of the incumbent CRAs in the presence of intense market rivalry.

- **Unsolicited Ratings**

To conclude this theme on notching for competition, the majority of respondents make repeated references to the issuance of unsolicited ratings as a vehicle for market development. Respondent B reveals that there are 'a couple of cases where Moody's was using unsolicited ratings to bully their way into the market'. A lengthier extract from Respondent H, a security analyst, further describes this occurrence when stating:

the other thing I think in my personal experience is that unsolicited ratings are real and a threat that a rating agency can use. It has been done and I am not sure what you can do about it at least in America. There are people who are too cheap to pay rating agencies and one of our biggest clients in ING was one of them and he got slapped with the unsolicited rating and I had to spend two months saying that our security exposure to this client was either the best BB+ you had ever seen in your life, or it was some kind of weak BBB.

However, even though the issuance of unsolicited ratings is not in doubt, Respondent B cautions that a legal battle in the 1990s may have curtailed this market development tactic at least at Moody's. Respondent B explains that:

there are two reasons to object unsolicited ratings and one is that ratings agencies are using unsolicited ratings as a way of blackmailing the issuer into using their ratings and that was the belief of the Department of Justice in the late 1990s. It was on that basis that Moody's stopped issuing unsolicited ratings.

This trend is important to the main theme because it evidences how incumbent CRAs may increase their client base by using the information signalling market power that new CRAs do not possess.

The results on unsolicited ratings conclude the findings under this theme. This chapter will now proceed to present findings on the last theme of tying.

#### **5.6.4 Findings: Tying**

This theme captures alleged factors on the practice of CRAs conditioning the provision of ratings on the sale of the other ratings or services. The various trends identified in stage 4 of this analysis are antitrust/ethics, business relationship and continuous dealing, covert negotiation, issuers' request, regulatory overdependence and ancillary services. To continue, the definitions and essence of these factors to the main theme are now presented below.

- **Antitrust/Ethics**

The majority of respondents reject the notion that CRAs formally or informally condition ratings on other products or services. There is a seeming consensus that such a practice is antitrust and unethical at least in the United States. Respondent H makes the point that:

I happen to know as a banker that if I am working for a bank and I tie a loan to some other service - that is a crime, I would go to jail for doing that. I would be surprised if that is not true for the rating agencies as well.

Similarly, Respondent B yields that:

I had the position to do it in Asia but I never did. I never had the political power or the position in the US but I mean tying is illegal between banks and issuers and I think it is unethical.

Evidently, CRAs have instituted internal compliance measures to mitigate against the conflict of interest that tying portends and Respondent C suggests that:

there was an S&P policy against tying if I recall, it was a part of a long list of 'do not's' in the company's conflict of interest management policy. We all knew that we could not set any conditions for issuing ratings or other products because it would seem that our processes and standards were compromised and the S&P term for it was rating dependency.

On the other hand, however, a few respondents admit that tying could manifest in informal ways as Respondent K acknowledges that 'you have to be a good judge of intentions to prove intended tying'. In the same way, Respondent J accords that 'I have never received a direct request from Moody's and S&P to come back next time, except if they do it covertly'.

This trend is important to the main theme because it shows respondents' awareness on the perils of tying in the market and not least to the competition.

- **Business Relationship and Continuous Dealing**

There is a suggestion by some respondents that recurrent business dealings and sustained relationships between underwriters and rating analysts may be misinterpreted as tying. In this vein, Respondent N thinks that:

tying is a necessity in financial services especially with securities. You cannot open your books to several third parties at the same time, so I think both issuers and the CRAs benefit from continuous dealing.

Similarly, for Respondent M, 'tying is business as usual; as they say if it is not broken do not fix it'. The proposition by these respondents is that parties in the

rating process enter freely into new contracts without the imposition of conditions by CRAs. Respondent D clarifies this proposition by reporting that:

it gets to be the kind of thing where the rating agency contact got to know the issuers well and hopefully, had a decent relationship with them, so you could see where over time there was just an assumption that they were going to continue working with them if things ran smoothly. It is like any business relationship, so it was not explicit as in rating products with an expectation for issuers to keep sending business the CRA's way but you know what it is like if you've got a good business relationship with someone and you know they are reliable, then you might keep working with them.

The essence of this trend to the main theme is a clarification of voluntary and involuntary dealing in the rating process as it is the latter, if proven, that will amount to tying.

- **Covert Negotiation**

In spite of the seeming consensus refuting the presence of tying practices, data extracts hint at the likelihood of informal tying arrangements in the rating process.

For instance, Respondent D informs that:

I am not convinced that tying is a widespread problem...I am just saying that I do not think that it was common. However, there could be tying practices but I am not sure it would be explicit.

In the same way, Respondent H describes a covert and hypothetical tying scenario wherein:

the issuers and the financial institutions are the ones who might instigate tying in this way. It is never done in writing, you will never see that in writing...and it could even be more diplomatically alluded to without being said. They could



just say - you know it is just getting too difficult to work with you guys on these things, we have got a solution, we have got customers to serve, we need to make some money, you are tying up our bankers, we bankers get paid a lot so if we have to do 20 extra hours to make you happy everybody loses money.

This trend is important to the main theme because it sheds light on the guises or pretexts through which tying may occur within and outside the rating process. Respondent H makes the telling point that ‘there are all sorts of different places for all kinds of conversations...having the right sort of conversation in the right place is half your job’. This is especially true for professionals in the rating process where confidentiality and disclosure rules abound.

- **Issuers’ Request**

There is a muted but important argument among a small section of respondents that tying is stimulated by issuers through their underwriters and not by CRAs. In the previous trend on covert negotiation, Respondent H mentions that ‘the issuers and financial institutions are the ones who might instigate tying’. Similarly, Respondent K holds the view that ‘we are tied to Moody’s, S&P and Fitch because they understand our books better than other rating agencies.

The essence of this trend to the main theme is an understanding that the motivations for tying may surpass the competitive activities of CRAs and possibly include the commercial objectives and the maintenance of rating relationships driven by issuers.

- **Regulatory Overdependence**

Another muted argument in the data is the argument that tying is the consequence of existing financial guidelines. Respondent I contends that ‘tying is

the result of market regulation'. The respondent also thinks that 'the demanded CRA profile for rating certain types of instruments profits some agencies to the disadvantage of others but I cannot say if that's all negative or not'. Going further, the respondent explains that:

Nearly all international regulations are similar in requesting ratings from agencies of a particular profile and that profile suggests Moody's, S&P and Fitch whichever way you look at it. One of the characteristics of the rating industry is the faith placed in it by regulation. So I would not classify this as commercial tying that amounts to abusing market power. I think it is more like regulatory tying.

As such, this trend is important to the main theme by indicating that the motivations for tying may once more surpass the competitive activities of CRAs and in all probability include satisfying the requirements of financial regulation.

- **Ancillary Services**

To conclude this theme on tying, respondents are mostly of the view that the sale and purchase of ancillary services, like risk assessment solutions, are beyond the remit of rating analysts and underwriters. Data extracts show that the maintenance of contact between CRAs and issuers for these services is conducted by marketing teams at CRAs and not by rating analysts. Particularly, Respondent E mentions that 'the sales/marketing function and the analytics function were strictly segregated to preserve analytical integrity'. However, there is evidence in the data to suggest that informal, desk based information services offered by CRAs may compromise this analytical integrity as Respondent F confers:

Now I would tell you one thing that did happen not in my department but in corporate finance. They had a service that they charged \$5000 a phone call for. And for that service, you effectively say you are a CFO of a company, you are going to merge with or acquire another company and you are very worried that if you did that your rating would be affected and that would affect the value of the bonds held and you were going to sell new bonds to acquire the company so you would like the lowest cost of funds to do that. So you call the rating agency, you explain to them what you were going to do and then they would tell you their feelings on whether or not this would affect your rating and for that you charge \$5000. This is a kind of telephone consulting... usually the answer was no, it would not change your rating, go ahead you have my blessing and do not forget to send me a cheque.

Even though the respondent specifies that the service is offered in corporate ratings and not structured ratings, the informality of the scenario raises questions on the total integrity of the rating process for both corporate and structured ratings. Respondent E confirms these reservations when arguing that:

Issuers would occasionally contact you and tell you that they were planning to do a particular issuance in the future, there was even a service I think whereby if they were contemplating a particular issuance they could contact the rating side and provide certain scenarios of what the issue might look like and get an additional opinion in terms of how that might be rated or what influence it would have on their own ratings, that sort of thing. So that did happen, yes.

The importance of this trend to the overall theme is the likelihood that a carrot and stick approach may be used to condition ratings by way of desk based

information and telephone services. This could have an effect on the behaviour of issuers in their selection of new CRAs.

The current trend concludes the findings on tying in this study and leads on to the next phase of thematic analysis. According to Braun and Clarke (2006) the purpose of defining and naming themes is to identify their essence and to determine aspects of the data that they capture by providing a coherent account of accompanying narrative through data extracts. Therefore, to conclude, stage 5 of this thematic analysis has focused on the defining and naming of themes. Individually, these themes are the impediments of new CRAs, notching for risks, notching for competition and tying.

## **5.7 Conclusion**

Overall, 33 factors within the 4 candidate themes have been identified using data extracts and their unique contributions and essence to the candidate themes have also been specified. From figures 1.6 to 1.9 below, the emerging themes of this study are: the impediments of new CRAs, notching for risks, notching for competition and tying. These themes have been generated and presented alongside the trends that best represent the data extracts that have been coded in relation to them. Figures 1.10 to 1.13 depict further refinement of the themes from initial thematic maps to developed thematic maps. The underlying data extracts have been stored within codes in the NVivo 10 CAQDAS and they define the themes for the onward review and analysis carried out in the succeeding stage 4 of thematic analysis – the review of themes. Thus, it is opportune to proceed to stage 6 of thematic analysis – the production of a report. Indeed, Braun and Clarke

(2006:23) assert that 'phase 6 begins when you have a set of fully worked-out themes and involves the final analysis and write-up of the report'. Hence, the current study will undertake stage 6 of Braun and Clarke's (2006) thematic analysis in a dedicated discussions chapter. The next chapter creates arguments in relation to the research question and explains how the findings in the current chapter fit with extant literature.

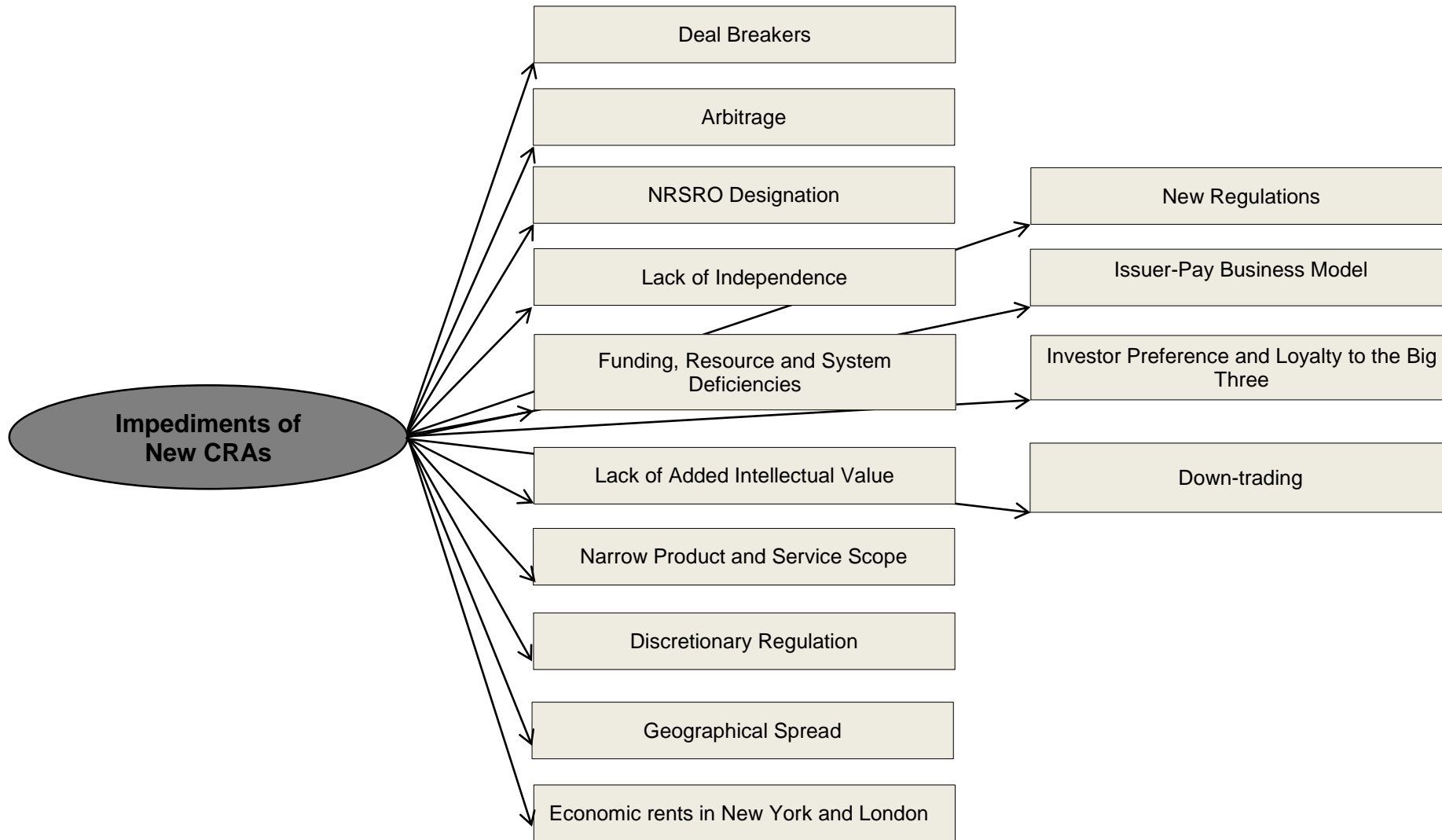


FIGURE 1.6 INITIAL THEMATIC MAP: THE IMPEDIMENTS OF NEW CRAS

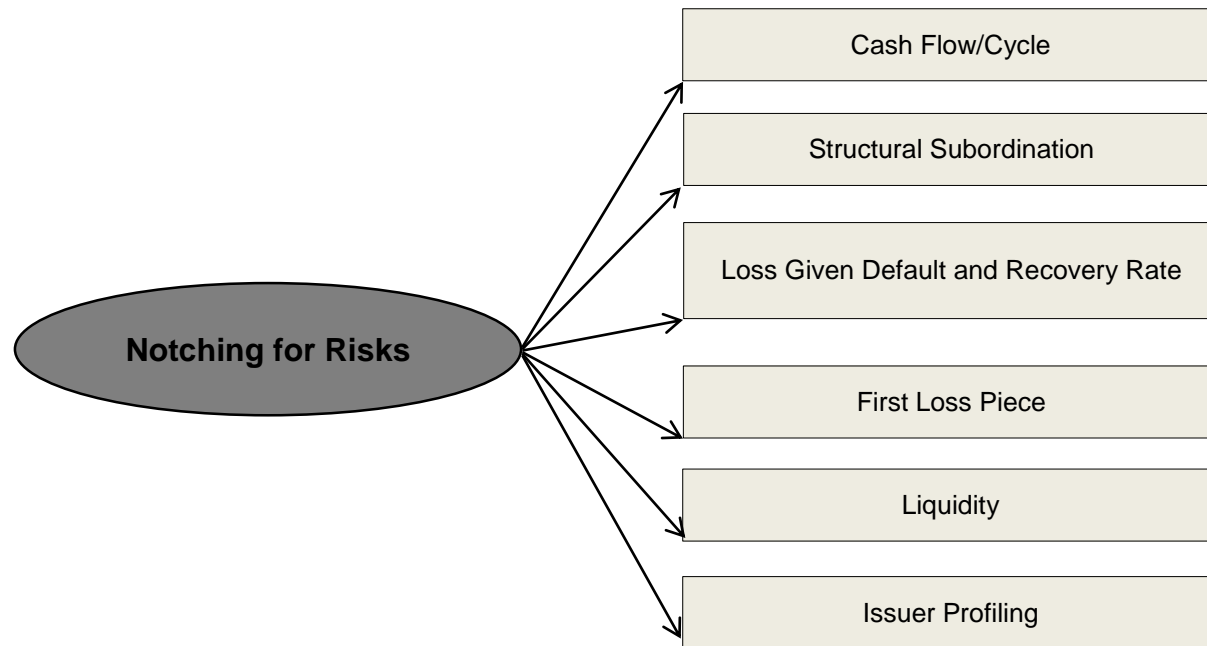


FIGURE 1.7 INITIAL THEMATIC MAP: NOTCHING FOR RISKS

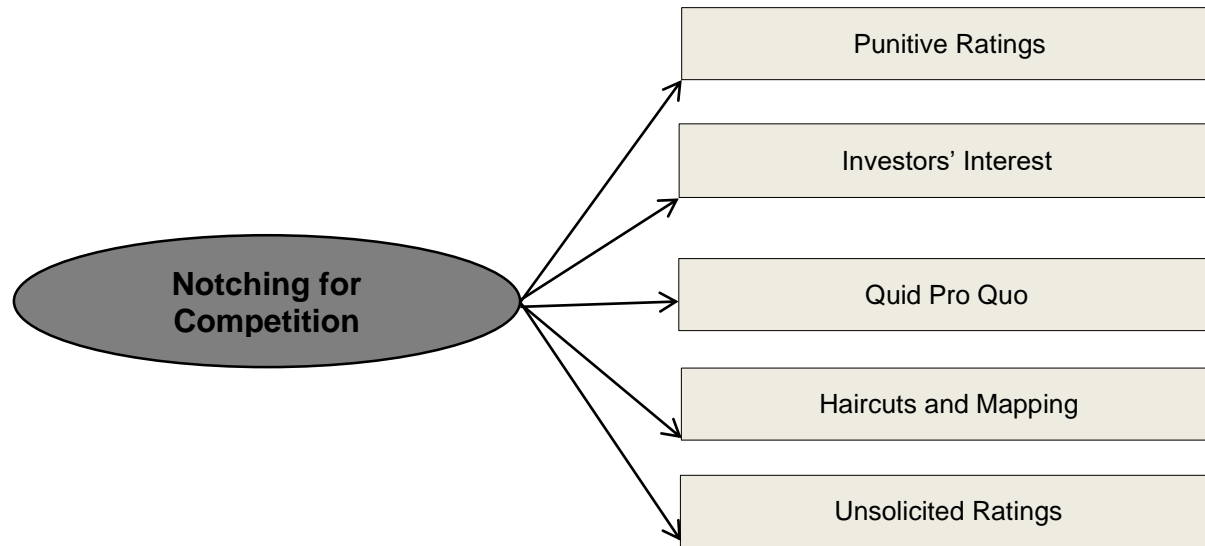


FIGURE 1.8 INITIAL THEMATIC MAP: NOTCHING FOR COMPETITION



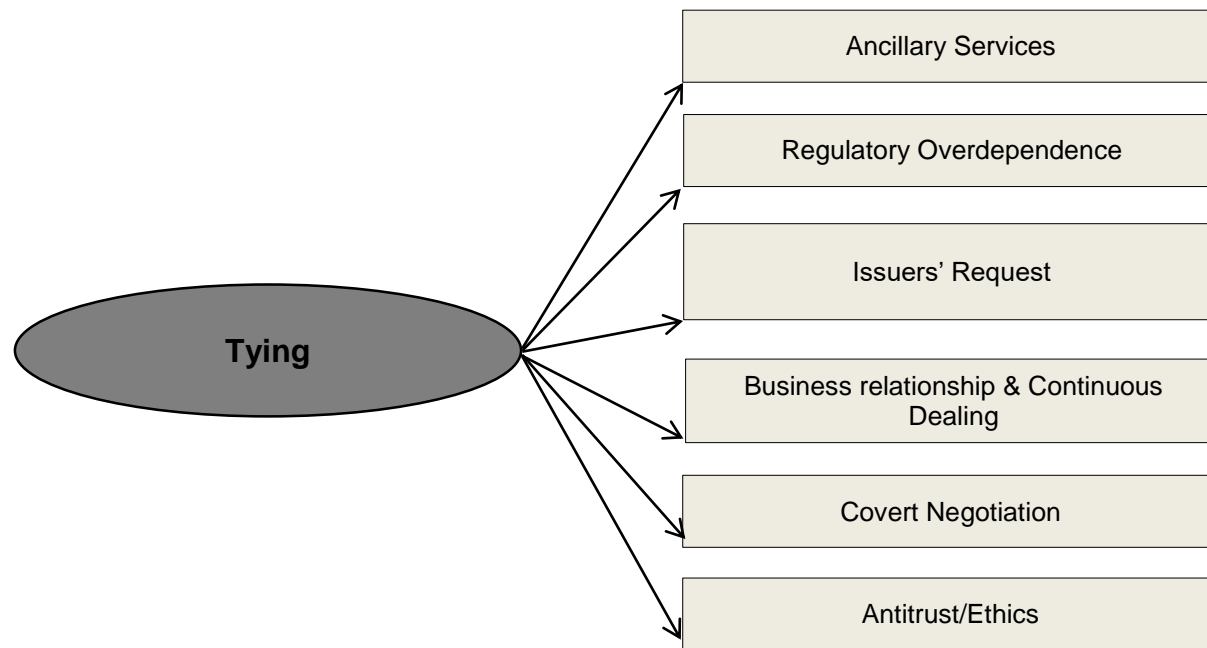


FIGURE 1.9 INITIAL THEMATIC MAP: TYING

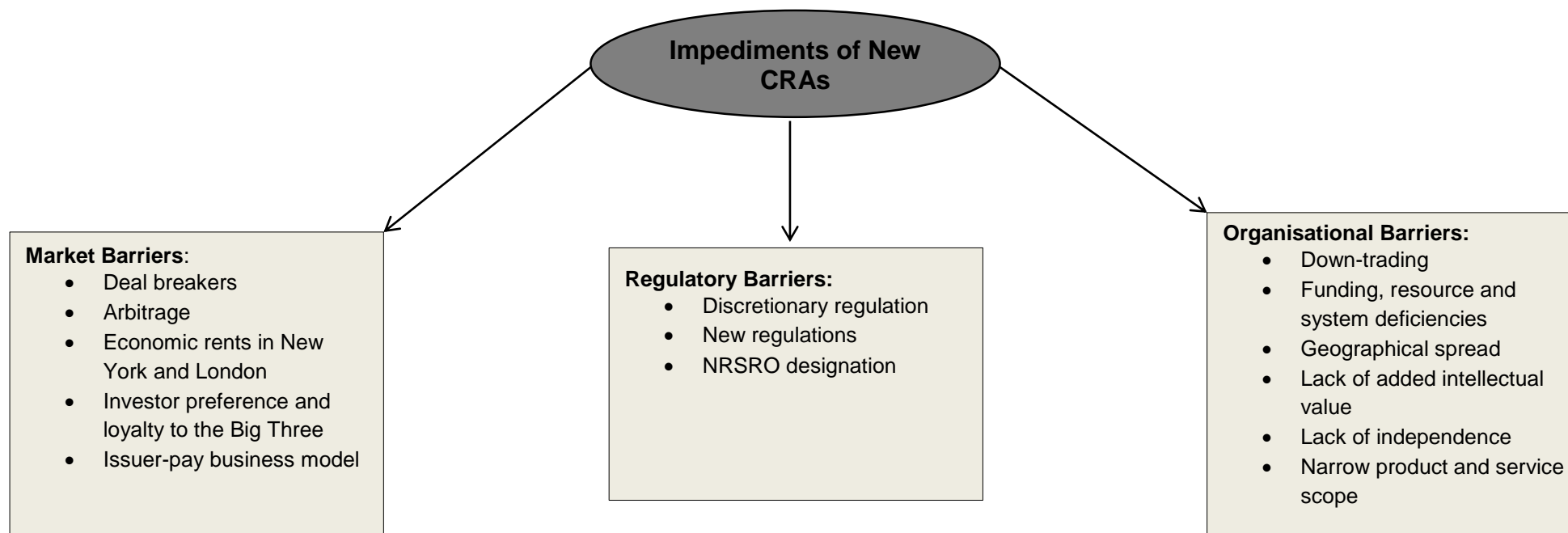


FIGURE 1.10 DEVELOPED THEMATIC MAP: IMPEDIMENTS OF NEW CRAS



FIGURE 1.11 DEVELOPED THEMATIC MAP: NOTCHING FOR RISKS

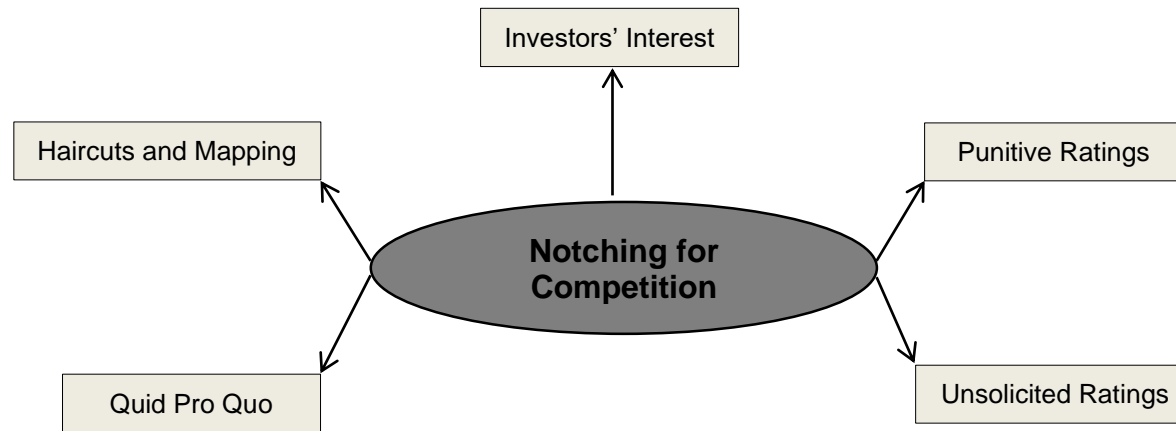


FIGURE 1.12 DEVELOPED THEMATIC MAP: NOTCHING FOR COMPETITION

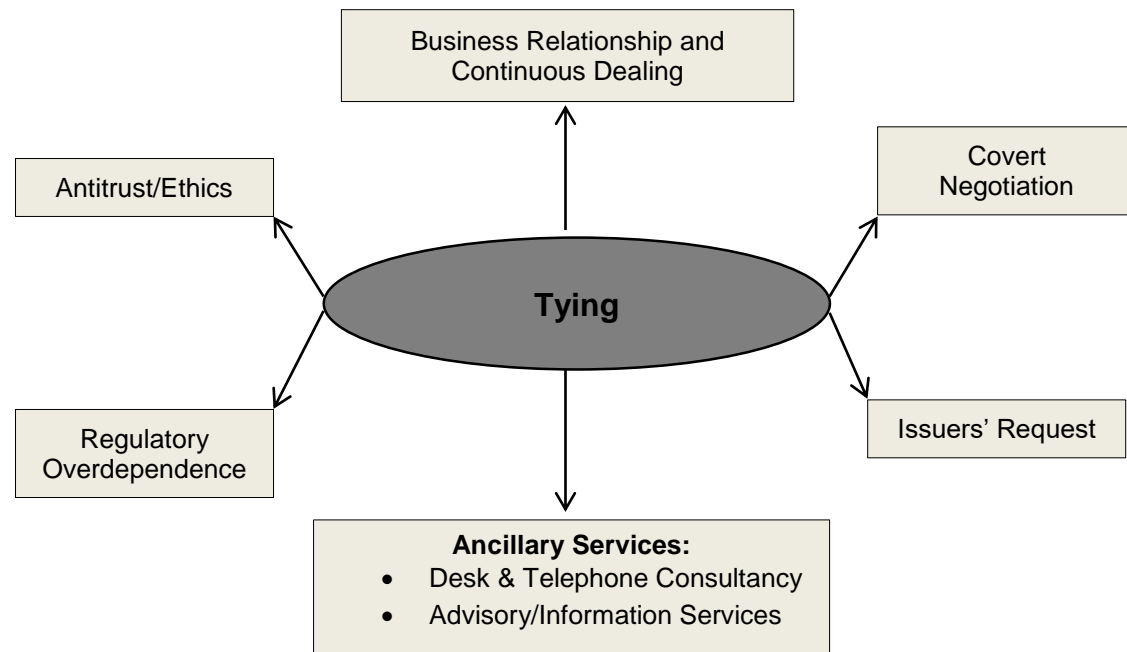


FIGURE 1.13 DEVELOPED THEMATIC MAP: TYING

## **CHAPTER SIX: DISCUSSION OF FINDINGS**

### **6.1 Introduction**

The previous chapter illustrated and presented findings from the data set using stages 1 – 5 of thematic analysis as specified by Braun and Clarke (2006). Stage 6 of thematic analysis entails the production of a report based on findings from stages 1 – 5. In this stage, ‘the task is to tell the complicated story of the data in a way which convinces the reader of the merit and validity of the analysis...the write-up must provide sufficient evidence of the themes within the data’ (Braun and Clarke, 2006:23) because, in the end, ‘the analytic narrative needs to go beyond description of the data and make an argument in relation to the research question’ (ibid). Hence, the structure and presentation of this discussion chapter will focus on addressing the research questions outlined in chapter 3 of this study. Once more, the research questions are:

1. What are the impediments of new CRAs in the rating industry?
2. What are the drivers of notching in the rating process?
3. What are the drivers of tying in the rating process?

Therefore, the main purpose of this chapter is to explain how the findings answer the research questions and to discuss how these findings fit with existing knowledge. Hence, by reiterating pertinent data extracts, this chapter proceeds to present concise narratives and analytical arguments in response to the stated research questions.

## **6.2 The Impediments of New CRAs in the Rating Industry**

The first question in this research is to explore the factors that impede new CRAs from entering the rating industry. The findings in this study show that new CRAs are faced with market, regulatory and organisational barriers in their attempt to gain market influence. The challenges faced by new CRAs in this regard encompass the attitude of market participants, the effects of market guidelines as well as internal organisational limitations. In view of the diversity of these challenges, the surrounding narratives and arguments are now discussed in the next sections.

### **6.2.1 Market Barriers Facing New CRAs**

In this study, the combination of a deal breaking tendency, arbitrage and economic rents are found to hinder the success of new CRAs. Other factors are investor preference and the issuer-pay business model which are now discussed separately.

Firstly, the deal breaking tendency of new CRAs is directly opposed to the deal making potential of incumbent CRAs because, as Respondent B puts it, 'the market wants a rating agency that helps them do more deals'. And although the incumbents have been slow to downgrade failing bonds, the thoughts of Respondent H are that 'they [the Big Three] have a really impressive statistical track record of saying whether something was investment grade or not'. For this reason, it is understandable that financial decision makers place a premium on obtaining the opinion of the Big Three. Indeed, Jeon and Lovo (2012:2) agree that an 'original incumbent such as Moody's or S&P has been in the market for a long time and has demonstrated its ability, albeit imperfect, in assessing default risk'. However, for new CRAs, a 'statistical record' is a trait that cannot be easily exhibited or replicated in

the short term. In light of this, White (2001) reasons that the market leans towards the incumbents because of a 'network effect' that is highly desired by issuers and underwriters alike as they demand consistency across rating categories. This network effect is particularly beneficial to incumbent CRAs but detrimental to new CRAs because, in attracting business, 'the structure of a network affects customer behaviour and marketing outcomes' (Kleindorfer and Wind: 247). On the balance of the data and extant literature, new CRAs rank as outsiders in a network effect that is prominent in guiding the behaviour of financial decision makers towards the Big Three because they are perceived to be better deal makers.

Secondly, another important finding in this study is the motivation for arbitrage. Once more, arbitrages are opportunities sought by issuers to swap one CRA for another by the tranches in a pool for the sole purpose of lowering the cost of debt issuance for each tranche. In extant literature, the phenomenon of arbitrage is called 'rating shopping' as 'firms may exploit the option of choosing among different rating agencies in order to pick the highest rating offered' (Bakalyar and Galil, 2014:270). The occurrence of rating shopping in structured finance is rampant, because in complex securities, 'there is a greater tendency for disagreement among rating agencies' (ibid). As such, Becker and Milbourn (2011) argue that a greater number of CRAs in the market encourages rating shopping and rating shopping in turn leads to rating inflation. They add that the growing influence of Fitch has in fact lowered the general quality of ratings and Griffin *et al.* (2013) agree by finding that CDOs rated exclusively by Moody's or S&P performed better than CDOs rated by both agencies.



Regarding issuers shopping for ratings, Respondent F made the point that ‘you could go to another rating agency that you can cut a deal with and they would assign an investment grade rating on those lower rated tranches’. However, Bakalyar and Galil (2014:279) used regression analysis to show that the distortion caused by rating inflation could be as minimal as one notch. And, in their view, ‘this may be a fair price for maintaining a competitive rating industry’ (ibid). Even so, inflated ratings only flourish ‘when there is a larger fraction of naïve investors in the market who take ratings at face value’ (Bolton *et al.*, 2009:1). It could also be argued that new CRAs lack any reputational concerns when they issue inflated ratings.

Thirdly, on the findings on economic rents, the majority of respondents think that the emphasis on CRAs of a particular profile is commercially advantageous to the Big Three. Recalling that Duff (2010) defined economic rents as payment above the factor cost of inputs and the benefits from passive ownership of a resources, White (2001) posits that increased regulation of the rating industry is a recipe for, among other things, economic rents. Similarly, Langohr and Langohr (2010) affirm that the small concentration of players in the industry deepens the amount of economic rents that CRAs can extract from issuers through rating fees. It would seem that deregulation, and not regulation, will be a viable means toward decreasing the level of economic rents and possibly levelling the playing field for big and new CRAs alike.

Fourthly, economic rent relates to the next area of focus – the preference of investors. Ab-initio, investors, as the end users of financial products, have shown a predilection for incumbent CRAs. According to Respondent E ‘investors want to see

Moody's and S&P because of habit'. Similarly, Respondent L remarked that in the selection of CRAs 'the factor that weighs the highest is investor preference' and therefore investors' trust in incumbent CRAs is a 'natural barrier to entry' for new CRAs (Jeon and Lovo, 2011:22). Hence, in spite of the growing number of new CRAs, 'nothing guarantees that these new entrants will gain the trust of the public that is necessary to survive in the business' (ibid: 23). This could be because investors are sophisticated enough to 'understand the structure of the game and can figure out CRAs' incentives' (Bolton *et al.*, 2009:3). Indeed, one of investors' criteria for CRA selection is the extent of reputation capital at stake (Bindseil, 2009). Investors believe that established CRAs thrive on their public image and brand name to survive in the market and so they have no reason to inflate ratings that may impair this image and brand. Therefore, investors also believe that new CRAs have little to no reputational capital at stake and thus will be more prone to issuing inflated ratings. Ultimately, there persists a shared belief that the Big Three provide higher quality risk assessments than other CRAs and this belief produces an endorsed reputation for big CRAs to continue to trade. This endorsed reputation is then viewed as a capital that produces returns like any asset, hence the term 'reputational capital' (Hunt, 2008). Yet, events of the 2008 financial crisis have challenged the wisdom of this belief and the validity of reputational capital.

Finally, the issuer-pay model is a sticking point for participants. Respondent D thinks that to assimilate new CRAs 'getting the people with the deep pockets to buy a lot of these ratings is going to be a challenge'. This is because the rating fees charged by new CRAs are approximately equivalent to those charged by big CRAs and, with little reputational capital at stake, issuers find no commercial benefits in patronising

new CRAs. Overall, three respondents aired the view that the issuer-pay model was altogether unsustainable and that another crisis or scandal could be the end of the industry as we know it. In contrast to the view put forward by respondents, Bonsall (2012) has found that as far as quality ratings go, the issuer-pay model aids greater projection of probability of payment than the alternative – an investor-pay model. Bonsall (2012) argues that the advent of the issuer-pay model in the 1970s increased the informational quality of ratings due to an increased information exchange between the rating agencies and the issuers added to the devotion of more resources to the credit analysis process. Ultimately, a sustainable business model for the rating industry depends on which players are more willing to pay for ratings. It would seem that, at least at the point of securitisation, issuers have a greater interest and a greater willingness to pay for ratings than do investors.

In conclusion, the current study finds that the lack of a statistical track record is one of the major barriers facing new CRAs. Furthermore, it finds that new CRAs are put in a position to compromise on rating quality when Issuers demand and/or expect them to assign investment grade ratings to subordinated debt issues. The consequence of this is arbitrage that manifests through inflated ratings and any subsequent default in repayment may further damage the already poor statistical track record of new CRAs. Finally, this study also finds that the issuer-pay model is a key barrier to new CRAs because, as their services cost as much as the Big Three's, issuers derive no economic value in contracting new CRAs. This summarises the discussion on market barriers facing new CRAs, the next section continues with a discussion on regulatory barriers.

### **6.2.2 Regulatory Barriers facing New CRAs**

In this study, respondents allude to discretionary regulation, new regulations and NRSRO designations as three administrative barriers that impede new CRAs. These barriers are now discussed separately.

To start with the first point of discretionary regulation, there is a view that new regulations merely encourage but do not oblige the use of new CRAs in the rating process. Respondent H affirmed that no new rating agencies are needed in the industry 'because it is not the law'. This notion is supported by Moloney (2014:668) who observes that new regulations around market structure in the rating industry are 'tentative'. The particular regulation alluded to is article 8d (1) of EU Regulations No. 462/2013 that requires that:

where an issuer or a related third party intends to appoint at least two credit rating agencies for the credit rating of the same issuance or entity, the issuer or a related third party shall consider appointing at least one credit rating agency with no more than 10% of the total market share (ESMA, 2013).

Fundamentally, it is the interpretation of 'consider' in article 8d that respondents and Moloney (2014) find discretionary and tentative. Particularly, Respondent G stated that 'the regulation encourages the use of an emerging CRA but it isn't mandatory so we do not have a commercial or regulatory incentive to use them'. By recommending 'at least two credit rating agencies', article 8d may in fact be an endorsement of the two rating norm and the network effect of ratings in favour of Moody's and S&P.

On the second finding on new regulations, one respondent notes that new regulations de-emphasise the need for ratings and that the development of internal credit opinions as an alternative will drive new CRAs out of business. Speaking about issuers, Respondent E asserts that the ‘thrust of legislation and regulation over the past decade has been for them to have their own internal opinions’. For example, in the United States, section 939A of the Dodd-Frank Act of 2010 has mandated the removal of all references and requirement of credit ratings in all US legislation in place of other credit standards (Darbellay, 2013). However, this is counterintuitive bearing in mind the efforts of the State to open up the rating industry to competition. In an environment where creditworthiness is internally determined by issuers, new CRAs at the bottom of the food chain assume an even lesser influence to be able to challenge the oligopoly. In the long run, an important question that could be considered will be whether the de-emphasis on external credit ratings has lessened the general issuance of ratings in the US bond market.

On the last argument of NRSRO designation, two respondents attest that the conditions set by the SEC to be NRSRO certified are discriminatory against new CRAs. They believe that the requirements are set too high to ensure that new CRAs are incapable of evidencing the credentials needed to be NRSRO validated. The impression of Respondent F is that ‘the SEC does not really allow anyone into the industry’. Similarly, Respondent B believes that the SEC’s requirement for CRA recognition is indicative of how ‘governments intervene by stifling competition’. Correspondingly, Langhor and Langohr (2010) agree that the conditions for obtaining NRSRO status are prohibitive and tightly controlled by the SEC. According to the SEC (2003:9) these conditions are:

- That the rating agency is nationally recognised in the United States as an issuer of credible and reliable ratings by the predominant users of securities ratings
- The organisational structure of the rating organisation
- The rating organisation's financial resources (to determine, among other things, whether it is able to operate independently of economic pressures or control from the companies it rates)
- The size and quality of the rating organisation's staff (to determine if the entity is capable of thoroughly and competently evaluating an issuer's credit)
- The rating organization's independence from the companies it rates
- The rating organization's rating procedures (to determine whether it has systematic procedures designed to produce credible and accurate ratings)
- Whether the rating organization has internal procedures to prevent the misuse of non-public information and whether those procedures are followed

Ensuing from the above, a particular prerequisite that new CRAs may find to be exceedingly prohibitive is nationwide recognition by the predominant users of securities ratings. Alas, the SEC has stated that the first condition of national recognition is 'the single most important factor in the Commission's staff assessment of NRSRO status' (ibid). On the other hand, observers view this requirement as insurmountable for new CRAs but favourable to their incumbent counterparts whose market presence and recognition predates even the incidence of the modern financial market (Kotz, 2010; Langohr and Langohr, 2010; Hemraj, 2014). Indeed, the SEC's conditions could be deemed as less enabling of competition when compared to those of the Bank of International Settlements (BIS). In comparison to the SEC, the BIS (1999) only mandates that to qualify as a rating agency 'national

supervisors would have to be satisfied that such an institution meets the minimum standards, including transparency, objectivity, independence, credibility and the possession of a track record' in accurately rating debt securities. However, it could be argued that the BIS' welcoming criteria is broad and open to loose interpretation. Possibly, in the interest of increased competition, international regulatory authorities ought to agree to a set of harmonised and binding conventions on CRA recognition that may lead to the evolution of robust new CRAs.

In conclusion, the current study finds that the regulatory barriers facing new CRAs can be traced to the shortfall of regulations such as article 8d (1) of EU Regulation 462/3013 to effectively mandate the use of new CRAs in the rating process. One respondent also cited that new regulations that de-emphasise the use of CRAs services in the rating process like the Dodd-Frank Act of 2010 in the US may have a negative effect in lowering the overall demand for ratings which, in effect, will also starve new CRAs of rating business. Finally, the current study also finds that the requirement set for NRSRO recognition, particularly nationwide recognition, constitutes a major barrier to new CRAs because they lack the reputation capital and history that the Big Three possess. These findings summarise the discussion on regulatory barriers facing new CRAs, the next section proceeds to discuss the organisational barriers.

### **6.2.3 Organisational Barriers Facing New CRAs**

Findings in this study point to certain internal factors within new CRAs that weaken their ability to compete with their established rivals. These factors are down-trading,

funding, resource and system deficiencies, geographical spread, a lack of added intellectual value, a lack of independence and a narrow product/service scope. These six factors are now discussed below.

Firstly, on down-trading, four respondents with ties to new CRAs indicate that issuers turn to them for help in structuring deals and not for rating services. The example of Egan-Jones is put forward and in the view of Respondent H the agency 'has not really developed a commercial rating business...it does proxies and not really credit ratings'. Proxies are just an example of a financial solution that a new CRA may offer to the market and the diversification of new CRAs into other business areas can be attributed to demand from market participants. Nonetheless, such diversification can equally be attributed to the need to survive in a market dominated by the Big Three. For example, Egan-Jones was founded in 1995 and in 2003 it started to provide commercial proxy recommendations in addition to ratings (Monks and Lajoux, 2010). The question that arises for Egan-Jones, along with other new CRAs, is the extent to which down-trading into other areas of business incurs an opportunity cost in the organisational learning and economies of scale that are needed to offset the dominance of the Big Three. This is a potential area for future research.

On the second factor of funding, resource and system deficiencies, the argument made by the majority of respondents is that new CRAs lack the financial capacity to own the talent, technology, intellectual and other assets to compete with the Big Three. Thus, Respondent M referred to new CRAs in Europe as mere audit firms that need more sophistication and competence to assign ratings with integrity. On



the other hand, if financing were to be available, Respondent D maintains that the financial return on investing in a new CRA is not clear. Therefore, some of the proposals in the literature have suggested for new CRAs to be funded by national or regional governments (Alcubilla and Pozo, 2012; Andenas and Chiu, 2013). Nevertheless, Naciri (2015) reflects that State involvement in ratings will introduce bias into the rating process and yield the familiar shortcomings of public services which include inefficiency and low innovation. Plausibly, this is why Respondent H retorts that they have 'heard some pretty scathing things about Korea Credit Rating Agency and nothing in that country is less than AA, you just can't find one'. Amidst these doubts, the challenge for new CRAs and regulators alike is how to establish new and financially viable CRAs that provide robust ratings to compete with the Big Three.

On the third factor of geographical spread, Respondent G believes that a global market presence is essential to quality ratings. The idea is that the permeating presence of the Big Three in financial hotspots provides them with more network and intellectual access. Although new CRAs can be found in Wall Street and Canary Wharf, it is the aggregate number of a new CRAs' locations that bequeaths both a knowledgebase and a clientele to be competitive as new CRAs around the world are mostly national in their focus (Bakalyar and Galil, 2014). Through continuous mergers and acquisitions, Moody's, S&P and Fitch have expanded their operations across the globe and, by so doing, they have extended their network and knowledgebase to offer rating solutions wherever high net worth issuers may be congregated.

On how new CRAs can increase their geographical spread, Respondent D states that 'if I was running one of those niche CRAs I would be looking to merge with somebody'. Such statement is informed by the knowledge that it is through mergers and acquisitions that the Big Three have slowly but surely achieved wide geographical spread to command economic rents and there is a traceable history. For instance, Dun and Bradstreet merged with Moody's in 1962 before Moody's became a freestanding firm in 2000. Similarly, Poor's and Standard merged in 1941 to become S&P before McGraw-Hill absorbed it in 1966. Equally, before Duff and Phelps' entered into an alliance with Fitch, it absorbed McCarthy, Crisanti and Maffei in 1991 (White, 2010). Furthermore, S&P's venture into Canada and Mexico in 1993 was on the back of acquiring CaVal (Standard & Poor's, 2014). Also, S&P entered Brazil and Mexico in 1997 through acquisitions (Standard & Poor's, 2014) after it had bought majority shares in India's CRISIL Ratings in 2005. Lastly, in 2008, S&P acquired Maalot to make incursions into Dubai, South Africa and Israel (ibid).

Relatively, Moody's has been the most aggressive acquirer of smaller CRAs. In 2002 it absorbed Crowe Chizek and bought over Kealhofer, McQuown and Vasicek (Moody's Analytics, 2014). Then in 2005 and 2006 it assimilated Economy.com and Wall St. Analytics respectively (ibid). In the middle of the financial crisis, in 2008 Moody's integrated Fermat and ENB consulting and bought majority stake in Copal Partners in 2011 (ibid). In addition, Moody's acquired Barrie and Hibbert Limited in 2011 before taking over Amba Investment Services in December 2013 (ibid).

Through these acquisitions, Moody's and S&P have leveraged external competencies to deliver core rating and ancillary services but they have also

reduced the number of new and independent CRAs available to the debt market; hence furthering market concentration and stifling competition.

The fourth organisational factor that impedes new CRAs is a stated lack of added intellectual value. A criticism of new CRAs in the data is that they have offered nothing new to the market but have recycled the methods and routines of the Big Three. Thus, Respondent K contemplates 'whether they [new CRAs] offer anything different' and Respondent F corresponds that new entrants 'are trying to make their name but always using the same methods'. Some of these methods and procedures are the alphanumeric rating scale, Monte Carlo simulation and the issuer-pay model. Yet, at the same time, Respondent K hinted that new CRAs with novel methods and rating scales add complexity to the rating process and undermine the simplicity and uniformity of current risk assessment standards. Mainly, Respondent K stresses that 'it does not matter how many [CRAs] are in the market, we market participants just do not want to be confused by too many systems'. By and large, the argument is that new CRAs do not make an intellectual contribution to the quality of ratings and this puts new CRAs in a complex position because market actors, like Respondent K, expect them to offer superior informational value but with the same systems as the Big Three in the interest of consistency. It is not clear whether new CRAs can deliver superior information with the same analytic and reporting systems. However, what is clear is that there is an increasing demand for quality ratings that more accurately predict the probability of default and new CRAs that can meet this demand will, at least, offer something in informational value to the market.

Furthermore, the above views of respondents F and K suggest that new CRAs face the dilemma of choosing between compatibility and innovation but a greater obstacle is the fact that ratings satisfy a very specific demand unlike other services. In other words, new CRAs cannot create a market through ratings as they are in a position where they can only innovate along the lines of financial products and not vice-versa (Dittrich, 2007). To take a cue from the early days of ratings, the first ratings published by Moody's in April 1909 followed the issuance of railroad bonds. In that era of reduced information, Moody's only responded to a market demand for more information (White, 2010). At the time of Moody's first ratings in 1909, American, English and Dutch investors had been buying bonds for one, two and three centuries respectively (Sylla, 2001). Therefore, for new CRAs to flourish in the future, new analytic information from competencies in assessing a new wave of asset and debt classes will be a pathway towards defusing the oligopoly. Perhaps, the publication of correlation reports<sup>61</sup>, like the incumbents do, could also be an entry tactic for new CRAs as they try to showcase their competency to the market.

On the fifth organisational barrier – a lack of independence, the data suggests that, in the interest of growing their client base, new CRAs are too lenient in the rating process. Respondent B notes that 'they think we are going to be too generous because we are hired by the clients'. This occurrence has been described as rating catering as CRAs allegedly lower rating standards and assign inflated ratings (Bakalyar and Galil, 2014). These claims are valid when new CRAs help issuers to structure bonds as already admitted to in this study regardless of the SEC's (2006:3)

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<sup>61</sup> Correlation reports are historical accounts of rating performance that plot a relationship between assigned ratings and actual debt repayment.

unequivocal ruling that it will 'prohibit an NRSRO from issuing a rating where the NRSRO or a person associated with the NRSRO has made recommendations as to structuring the same products that it rates'. Yet, there is no evidence in the data to say that new CRAs have gone on to rate the products that they have helped to structure but compliance to the SEC's ruling means that new CRAs are once more relegated to a position of down-trading in the rating process. Similarly, there is neither any evidence in the data to suggest that new CRAs are fortified with 'a demarcation line' or firewall that separates the various parts of their operations (Sinclair, 1994:138). This is because, as new CRAs strive to survive through diversification, they tend to offer advisory services alongside rating services albeit without the resources for a demarcation line or firewall. In fact, Respondent B, a partner at a new CRA, admits that there is nothing wrong with rating analysts jointly offering rating and advisory services because 'if you have a system that is flexible it allows you to use different parts of the system for different tasks'. In addition, other resource limitations characteristic of new CRAs make similar issues of conflict of interest more challenging to manage.

Lastly, the focus on a narrow product and service scope is stressed by four respondents to be a barrier to new CRAs. Respondent I alleges that new CRAs 'do not provide ratings for all types of instruments' as do the Big Three. However, the strength of this argument is challenged by Fitch's rise to prominence because the agency used its leaner organisational structure to offer unique rating services in the advent of asset-backed securities in the late 1990s (Fight, 2001). Correspondingly, Dittrich (2007:103) asserts that 'being first to market with a new rating service is the only realistic possibility to gain ground against Moody's and S&P'. These views

suggest that new CRAs cannot afford to broaden their product and service scope because of a replacement effect. The replacement effect occurs when an agile culture of risk taking through diversification in an industry is subdued because existing clients continue to provide new business for the dominant players (Tirole, 1998). Hence, there is a relatively low pressure to grow market share by offering something different to a fixed and steady clientele. Thus, new CRAs are slow to broaden their range of product and services because the implications of failed inventions far outweigh the financial benefits that accrue from them (Schwarz, 2002). This corresponds with the view of Respondent D that the rating 'product itself is too narrow' and even though new CRAs 'try to create a niche for themselves...I am not sure that niche is really a valid one'. To be sure, new CRAs may only broaden their offerings at the same pace at which financial products evolve to demand ratings.

Ultimately, Duff and Einig (2009) determined that, in order of importance, the key properties of quality ratings are: reputation, trust, values, transparency, timeliness, expertise, investor orientation, methodology, independence, issuer orientation, internal process and responsiveness. Undesirably, a shortage of these attributes is evident in the organisational barriers facing new CRAs that are discussed in this section and they further explain their marginalisation in the rating process.

In conclusion, the current study finds that a significant organisation barrier facing new CRAs is the tendency to down-trade or diversify into advisory services to the extent that rating resources are spread thinly. The study also finds that a limited geographical spread, in comparison to the Big Three, is an impediment to the market

development and recognition of new CRAs. Furthermore, new CRAs' perceived lack of intellectual originality and their reliance on the established methods of the Big Three has been found to make them unattractive to market participants. Finally, the scope of new CRAs' operations, owing to their limited manpower and other resources, is found to be too narrow to accommodate the wide spectrum of sophisticated issuers' needs. Accordingly, this summarises the discussion on the first research question on the impediments of new CRAs in the market. The next section will present a discussion on the second question – the drivers of notching in the rating process.

### **6.3 The Drivers of Notching for Risks in the Rating Process**

The second research question in this study aims to explore the factors that motivate notching behaviour in the rating process. The findings in this study show that there are two types of notching in the rating process. Firstly, there are notching behaviours for the risks inherent in rated bonds and secondly, there are notching behaviours conditioned on factors other than inherent risks. The discussion in the section focuses on the first kind of notching – notching for risks<sup>62</sup>. It has been found in section 5.6.2 of this study that rating analysts are faced with debt quality and managerial competence issues during the notching process for risks. Hence, the surrounding narratives and arguments on this finding are discussed in the sections below.

#### **6.3.1 Debt Quality**

In the findings in section 5.6.2 a combination of cash flow assumptions, first loss piece, liquidity, loss given default and recovery rate variable are found to stimulate

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<sup>62</sup> A discussion on the second kind of notching [notching for competition] is presented in section 7.4 as an independent and developed theme that also answers the second research question.

risk notching behaviours in the rating process. Together, these constructs comprise the sub-theme on debt quality and they are now discussed.

Firstly, respondents argue that conflicting cash flow assumptions between rating agencies are a cause for notching counterpart ratings. Before discussing cash flows it is paramount to understand the arrangement of pools of securities. Peterson (2012) writes that the purpose of structured finance is to group debt instruments together to distribute risks and issue new securities that are backed by the cash flows of assets in the group. In practice, the process of grouping debt instruments together is known as 'pooling' and in principle, assets can only be securitised when they have a cash flow. Hence, Kothari (2006:232) asserts that within a pool cash flows are integrated and 'it would be juvenile to expect the separated pool to be substantially different from the pools that have been separated'. Thus, Respondent C notes that 'you run the cash flow model to determine how the tranches can absorb defaults' and according to Respondent K, when ratings are different 'most of the time the reason could be cash flow'. Like Respondents C and K in this study, Carron *et al.* (2003) maintain that CRAs generally rate all bonds within pools of securities because of their shared cash flows. Therefore, it is understandable that different CRAs make different cash flow assumptions and therefore the discretion to rate all bond tranches in a pool is a norm and not an exception.

Secondly, the findings indicate that notching may arise when superior debt tranches are allocated to big CRAs and subordinate tranches are allocated to small CRAs in the rating process. This is because 'usually the senior rating agencies would be asked to rate the most senior security' as revealed by Respondent F. In a typical



pool there are three tranches and from the bottom up the lowest level is the equity or first loss piece that is structured to absorb initial losses<sup>63</sup>. The second or middle level is the mezzanine tranche which absorbs additional losses. Then, the first tranche known as the senior tranche absorbs further losses from the mezzanine and equity tranches in that order (McNamara, 2012). Due to this arrangement, the first tranches are protected from default risks to the extent that the mezzanine and first loss tranches absorb credit losses (ibid). In the event of default, originators follow an investment defeasance plan to liquidate the pool at substantial discounts and to pay-off senior tranche holders followed by other creditors and capital note investors (Kim, 2012). The figure below presents a typical tranching arrangement.

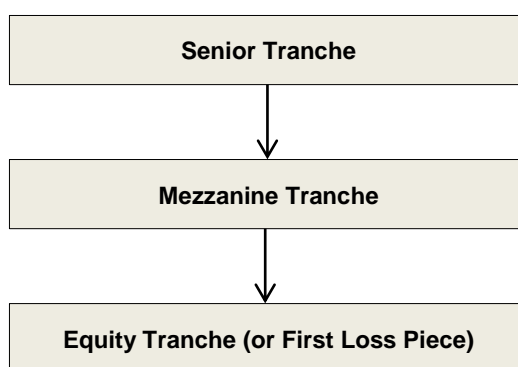


FIGURE 1.14 TYPICAL TRANCHING SCHEME

Furthermore, tranches are essentially structured or arranged by the nature of assets' intrinsic risks within the pool (Kothari, 2006). When risks are structured in a pool, they are not allocated uniformly to different tranches because investors have the tendency of comparing pools of securities and they understand the risk differentials of investing in them (ibid). Therefore, the view of Respondents F and the literature confirms that notched ratings may arise when senior and equity tranches are allocated to different agencies for assessment in the rating process.

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<sup>63</sup> In the event of default, investors of the first loss piece are compensated only after investors of the senior and mezzanine tranches have been compensated in that order.

Thirdly, two respondents allude to liquidity as a motivation for risk notching in the rating process. According to Respondent N 'notching is necessary if it is done to signify mixed liquidity within a bond structure'. Likewise, Respondent B mentioned liquidity as one of the five dimensions of asset performance in the ratings process. As a variable, liquidity is the rate at which an asset can be converted into cash with minimal effect on its value. It is understood that assets in a pool have varying levels of liquidity (Brigham and Ehrhardt, 2016) and 'liquidity costs are much higher for high-yield bonds than for investment grade bonds' in credit ratings (Meyers, 2010:110). Thus, Munk (2011) mentions that investors want compensation for liquidity risks and so they demand a liquidity premium in the securitisation process in the form of higher expected returns. Generally, the liquidity premiums are higher for non-investment bonds or first loss pieces and lower for investment bonds (ibid). In a US study, Dick-Nielsen *et al.* (2009) computed the liquidity premia for US issued bonds before and after the 2008 financial crisis. They show that the liquidity premium for AAA- and AA- rated bonds was 1-2 basis points before and 13-45 basis points after the financial crisis. In contrast, the liquidity premium for B rated bonds was 69-116 and 162-309 basis points before and after the crisis. According to Munk (2011:419), the 'research suggests that liquidity risk in corporate bonds is significant and can explain at least part of the credit spread puzzle', as well as the notching phenomenon in structured finance. Thus, assenting to the expressed views of Respondents B and N, it can be suggested that the liquidity dimension is a valid basis for risk notching in the rating process.

When discussing the fourth dimension of loss given default (LGD) and recovery rate in the sub-theme of debt quality, Respondent E states that divergent assumptions on LGD and recovery rate may result in the assignment of divergent ratings that could lead to a suspicion of notching. This is illustrated by an excerpt from Respondent E when arguing that ‘the loss given default is a key driver in ensuring that the theoretical priority of settling debt in terms of the default is actually going to work’. Indeed, along with the probability of default, LGD and the recovery rate is a primary component of credit risk (Langohr and Langohr, 2010).

Furthermore, in estimating LGD and recovery rates, rating analysts strive to address two simple but challenging questions: the legal proximity of the issuer to the assets in the event of a default and the liquidity of those assets (Alexander and Dhumale, 2012). Even when rating agencies agree on the probability of default, they are unlikely to agree on LGD and recovery rate (Blinder *et al.*, 2013). For instance, for non AAA tranches, ‘it is likely that Moody’s will produce a lower rating’ (Blinder *et al.*, 2013:203). The distinctiveness of the LGD and recovery rate dimension is that its assumptions are not clear when default rates are high. ‘It may well be the case that in extreme recessions LGD is generally high’ (Mishkin, 2009:229). However, what is clear, from the submission of Respondent E, is that the LGD and recovery rate variable is a major component in the determination of credit ratings which leads to rating spread. To illustrate the bearing of the LGD and recovery rate variable in the rating process Blinder *et al.* (2013) present a comparison of 59,547 tranches of all types of securities rated by Moody’s, S&P and Fitch as at January 2007. Their comparison shows that when the LGD and recovery rate factor is present, Moody’s ratings are 1.5 notches lower than those of S&P and Fitch; ‘this indicates that the

difference is a result of Moody's methodology, rather than the characteristics of a particular market' (Blinder *et al.*, 2013:203). Therefore, there is consensus between Respondent E and the literature that different LGD and recovery rate assumptions may lead to adverse ratings in the rating process, hence notching. Yet, Lorenz (2008) cites that the difficulty in measuring LGD and recovery rates means that there is less precision in the assumption of this dimension in risk modelling.

Furthermore, according to Respondent F 'unsecured exposures would have lower recoveries if they do default so the rating would not be the same but it doesn't change the method, you just change the recovery rate'. Also, in credit risk modelling, the 'LGD is usually observed and modelled via the recovery rate' (Lorenz, 2008:44). In the absence of more recent data on yield and expected recovery, Crabbe and Post (1992) presented empirical evidence on expected recovery in the event of default for various classes of bonds as follows:

**Table 9 Bond Recovery Rates**

<b>Class of Bonds</b>	<b>Recovery rate</b>
Senior Secured Bonds	53.5
Senior Unsecured Bonds	44.6
Senior Unsubordinated Bonds	36.0
Subordinated Bonds	28.7
Junior Subordinated Bonds	16.3

(Crabbe and Post, 1992)

Ensuing from table 9 above, conventionally, the market expects the LGD and recovery rate in normal periods to be 40%, slightly lower than the 45% historical recovery rate of investment grade unsecured bonds. Correspondingly, Respondent I alludes that 'rating agencies have an assumed recovery rate for modelling the cash flows of secured and unsecured assets. The assumed recovery rate is a standard

percentage and it could be anything between 40 and 60%'. It is worth noting that recovery rates are themselves procyclical as seen in the experience of General Motors' unsecured bonds that recovered only by 10% in the 2008 financial crisis (Bullock, 2009). In a study, Altman (2004) compiles the recovery rates of a wide sample of secured and unsecured bonds in times boom and recession from 1978 - 2004. Over this period, it is found that senior tranchised secured bonds had an average recovery rate of \$0.5271 while senior tranches of unsecured bonds recovered by \$0.3534. Similarly, in 1999, Moody's reported the average recovery for senior unsecured bonds to be \$51.26 for every \$100 investment and a mere \$18.88 for equity tranche unsecured bonds (Moody's Investors Service, 1999). Finally, Fitch's analysis of a 35% recovery rate for senior tranche unsecured bonds and 17% for equity tranche unsecured bonds is even more conservative (Grossman *et al.*, 2001). Hence, this corresponds with the thoughts of Respondent F that 'unsecured exposures would have lower recoveries if they do default so the rating would not be the same'. As a result, it makes analytical sense to notch bonds on this dimension but the question that remains is exactly how the recovery rate should be estimated (Altman and Eberhart, 1994).

In conclusion, the key findings of this study on the sub-theme of debt quality in notching for risks is that rating disparities between CRAs can be explained by their [CRAs'] conflicting assumptions on issuers' cash flows, liquidity and LDG as indexed by the recovery rate. Moreover, rating spreads will continue to occur for as long as CRAs have independent control over cash flow, liquidity and LGD estimations. For this reason, Rousseau (2005:27) argues that 'notching is not a practice that is problematic per se' because it is a valid exercise to signal risks. This summarises the

discussion on the debt quality motivations that drive risk notching, the next section discusses the sub-theme on managerial competence.

### **6.3.2 Managerial Competence**

Findings in section 5.6.2 of this study point to certain managerial characteristics routinely assessed in the rating process that may produce notched ratings. These characteristics are the profile and structural subordination of issuers as discussed in this section.

The first dimension of managerial competence found in the data is issuer profiling. Although only Respondent B [a rating analyst] alluded to this dimension, its importance to the research question and its keyness to the studied phenomenon in the rating process necessitate its discussion. Primarily, the issuer profile underscores the quality and financial standing of the obligor (Beaumont, 2004). The profiling of issuers is important to generate information about an issuer on the soundness of its management practices and the solvency of its outstanding debt issues (Tetrault, 2006). Respondent B admitted to exploring different options to profile issuers during the rating process when reporting that:

I would do as many things as I could, I would play as many mind games as I could to try to get reasonable inputs, because obviously people have a vested interest on the other hand, of giving you inflated inputs.

In agreement with Respondent B, Naciri (2015) contends that it is customary for the credit rating process to commence with an understanding of both the business and financial exposures of issuers because they themselves are entities that pose risks.

Moreover, a typical S&P assumption of issuers' risk would depend on the corporate rating of the obligor; whether it is of investment or speculative grade. When issuers hold investment grade ratings, the inherent business risk value is assigned more weight in the overall rating. On the contrary, for issuers that possess speculative grade ratings, the inherent financial risk is assigned more weight in the overall weighting (ibid, 2015). The explanation for this is that the business and financial risk profile of issuers 'combine to determine the appropriate anchoring that can be changed by one or more notches' (ibid:80). Ultimately, because rating changes are triggered by fundamental changes in issuers' risks (Kliger and Sarig, 2000), notched ratings from issuer profiling in the rating process can be understood through diverse assumptions of issuers' business and financial risks.

Furthermore, the second and last dimension of managerial competence indicated in the data is structural subordination. The relevance of structural subordination is captured by Respondent E in the statement below:

My understanding of notching from S&P is, where there may be something rated single A or the obligor is rated single A and you might rate a particular issuance A- or even BBB+ based on - it could be structural subordination, it could be non-material incremental probability of default, that sort of thing.

To comment on the above, Standard and Poor's (2011:7) strongly affirm that 'notching also applies to the structural subordination of debt issued by operating subsidiaries or holding companies that are part of an enterprise viewed as a single economic entity. For example, the debt of a holding company may be rated lower than the debt of its subsidiaries that have the enterprise's assets and cash flows'. The relevance of structural subordination to managerial competence in the rating

process is the benchmarking of structured ratings to issuers' corporate rating. This is because in a standard analysis 'a secured situation usually involves a notching of one or two notches above the corporate rating' (Respondent B). By the same token, much like the issuer profiling factor, the basing of structured ratings on corporate rating is part of the financial analysis of an issuer because it is a fundamental capital structure indicator (Douglas, 2010).

Equally important, in the view of rating analysts, issuers with investment grade corporate ratings are less likely to default on their securities than issuers with speculative grade corporate ratings. Indeed, 'it is important for the analyst/investor to understand what the relative ranking of the proposed bond issue in the capital structure is and whether it will be structurally subordinated to other debt' (Gadge *et al.*, 2013:235). Significantly, some knowledge of structural subordination is particularly important to investors' decision making because 'many issuers have a holding company structure where the bond is issued out of the holding company while the funds may be intended for use by one or more of the group companies' (*ibid*). Indeed, the view of Gadge *et al.* (2013) corresponds with S&P's definition of notching earlier expressed as 'the differentiation of issues in relation to the issuer's fundamental creditworthiness' (Dittrich 2007:113). It also matches the contention that notching occurs when the 'issuer's rating is different from the issue's rating' (Galil, 2003:30) and Respondent L believes that a 'less contentious notching [practice] is subordination on the basis of risks'. Thus, notching in the rating process can be understood through CRAs' use of conflicting corporate ratings in the process of structural subordination.



In conclusion, the key findings of this study on the sub-theme of managerial competence in notching for risks is that rating spreads can be explained by CRAs' conflicting perceptions on the issuer profile and managerial competence of an obligor. Unsurprisingly, subjective and qualitative assessments of an issuer's business conduct and internal activities are bound to vary between CRAs, as well as their assumptions in the structural subordination process of pegging structured ratings on corporate ratings. As a result, ratings assigned following issuer profiling and structural subordination tend to differ and can be perceived as notched ratings. This summarises the discussion on the sub-theme of managerial competence and the next section will present a discussion on the third theme – notching for competition.

#### **6.4 The Drivers of Notching for Competition in the Rating Process**

As previously explained in section 6.1, the second question in this research is to explore the factors that motivate notching behaviour in the rating process. The findings in this study show that there are two types of notching in the rating process. While the previous section 6.3 discussed notching behaviours for risks inherent in rated instruments, the current section discusses notching behaviours conditioned on factors other than inherent risks. The specific factors found in this theme are haircuts and mapping, investors' interest, punitive ratings, quid pro quo and unsolicited ratings. Together, the expressed motivations for these factors in the rating process fall short of risk signalling but suggest intent to compete. To reiterate, the factors in this theme have not been grouped into sub-themes because they are too heterogeneous to be classified into subjects but homogenous enough to capture the essence of notching for competition. The surrounding narratives and arguments on the factors earlier cited in section 5.6.3 are now discussed.

On the first factor, i.e. haircuts and mapping, there is evidence in the data to suggest that in being conservative, rating analysts routinely devalue counterpart ratings during the ratings process. The taking of haircuts could be a reflection of 'systematic pessimism' on the part of the rater (Bruno *et al.*, 2011:16). In this regard, Respondent B noted that 'I think they look at our analysis and they just take haircuts on our cash flow assumptions. Their assumption is that we are going to be too generous'. Similarly, Respondent E reported that they:

would want to check the mappings in terms of default probabilities for sure between my own agency. If I was S&P, between S&P and Moody and there are differences, so it may be for example that a B+ rating by Moody's, I might put in as a B by S&P.

As rating analysts make varied and independent assumptions in the rating process, their outlooks on issuers' cash flows, principal and interest payments are bound to differ and this affords an opportunity to assign adverse counterpart ratings that imply notching. The literature on haircuts and mapping in the rating process is scant but Jeon and Lovo (2011) hypothesise that CRAs face policy choices on how to map ratings using internal information because there exists a distribution of possible ratings. In June 2007 the SEC ostensibly approved mapping by mandating CRAs to incorporate counterpart ratings only after they have lowered them through a mapping methodology (SEC, 2007; Alcubilla and Pozo, 2012). The question that remains unanswered in financial legislation is clarity in CRAs' models for the calculation of haircuts, or whether a standardised haircut model will be viable in the rating process.

The second factor in the notching for competition theme is the assignment of adverse unsolicited ratings under the guise of protecting investors' interest. In this regard, Respondent D cites that 'the motivation for making unsolicited ratings was that the rating agency was looking out for the interest of the investors rather than the issuers'. In fact, Moody's has stated that the purpose of its notching scheme is to ensure that securities assigned with identical ratings have an identical probability of default (Bertocchi *et al.*, 2013). However, Respondent I criticises unsolicited rating for being a 'standard procedure' without thorough analytical content. Notched ratings manifest more in CDO debt structures (Kothari, 2006) and Moody's and S&P consistently downgrade counterpart CDOs by four notches (Meissner, 2009). On Fitch's part, it accepts the lower of two split ratings issued by Moody's and S&P. However, if only one competitor has rated the structure, then Fitch downgrades it by one notch for investment grade and by two notches for non-investment grade (Meissner, 2009). Even so, it is not clear how these measures safeguard the interest of investors without detailed analysis. An extended extract from Respondent B articulates this ambiguity:

If you are notching on an alphanumeric scale, it is just a political negotiation, it has no numerical content because structured finance is numerical and intrinsically numerical. So, if you are going to notch you need to know what the deals are, everybody should be able to evaluate that the notched rating is consistent with value. Notching is a very simple matter if I can compare your scale to my scale. I do not think that structured ratings are opinions; not really. They are the output of a model.

The danger of notching under the pretext of investors' interest is that lower ratings lead to lower prices for subordinated structures that contain unrated assets. This

may be mistaken as an opportunity by unwary investors (Meissner, 2009) and prove a costlier investment. Perhaps, Byoun and Shin (2003) are referring to Moody's when they affirm CRAs' argument of having the responsibility of protecting investors against firm risks by issuing unsolicited ratings at no cost to investors. To this end Moody's and S&P abstain from using the terms 'solicited' and 'unsolicited' because they insist that all ratings are informative to issuers and investors. Moreover, in 1991, Moody's claimed that there was investor demand for unsolicited ratings and would provide free ratings to the public when there was sufficient interest in an issuer or issue (Poon, 2003). Overall, it is the lack of numerical content to educate investors on the probability of default that has agitated the debates on the purpose and intent of rating downgrades. This debate is even more intensified because nowadays 'investors face a large spectrum of investment alternatives, a rating's information value is a crucial parameter in determining their investment decisions' (Güttler and Paveleanu, 2005:1). What is clear is that notwithstanding the competence of the rating agency, original ratings embody more factual analytical content for debt structures than notched ratings. To reiterate the opinion of Respondent B, notched ratings without analysis 'is just a political negotiation' because there is a lack of structured content to advise investors.

With regards to the third factor of punitive ratings, there is sufficient evidence in the data to suggest that incumbent CRAs assign adverse ratings to consolidate their market position. However, these adverse ratings also have the effect of damaging the risk profile of issuers. According to Respondent L, 'there is inhibitive notching that punishes issuers for choosing a new rating agency'. In addition, Respondent F

verifies that ‘their way at Moody’s was to notch people down if their rating was not a Moody’s rating’. The respondent continued:

and if, let’s say, they had a security rated by Fitch, then they would say would you like this security rated by Moody’s? Which of course means would you like to pay a fee? If the answer was no, well we have a rating by Standard & Poor’s or Fitch, they would say yes you do but unfortunately they are not as good as we are, so I am going to reduce the rating because I want to be conservative.

Yet, it is difficult to support this key finding with prior academic work bearing in mind the indeterminate presence of punitive notching in the literature. Frost (2007) asserts that prior studies investigating notching are inconclusive and leave the notching issue unresolved. However, the data in this study provides the missing empirical evidence in the literature on the presence of notching practices targeted at undermining competitors in the rating process. Poignantly, Respondent H states that punitive notching happens ‘because they [Moody’s in this case] want to get paid’. Although not a direct motivator, it can be said that the lack of direct legislation against punitive notching is an enabler of this anticompetitive behaviour.

In the fourth factor following punitive ratings, there is also empirical evidence in the data and indeed in the literature, to say that punitive notching is a mutual practice among CRAs. However, the market standing of big and new CRAs puts some agencies at a competitive advantage and others at a disadvantage of quid pro quo notching. Respondent A alludes to disregarding S&P ratings because it is expected that S&P would equally disregard Moody’s ratings. On mutual notching Respondent F confirms that:

Standard & Poor's did the same thing as Moody's, oh yes. Maybe they did one notch and Moody's did two notches. In the common world this is called blackmail but in the rating industry this is called notching.

Such 'blackmail' and reciprocal behaviour can be explained through the lens of game theory in industrial economics. Fundamentally, game theory is concerned with the competitive moves and interrelationships of a set of competitors. The central idea of game theory is that the strategist has to anticipate the reaction of competitors (Johnson *et al.*, 2014). Furthermore, the core assumptions of game theory are that:

- there is a small number of competitors
- competitors behave rationally to advance own economic interests
- the activity of one competitor affects all competitors (interdependent relationships)
- competitors are aware of interdependencies, potential moves and reaction by rivals

The attributes above are precisely characteristic of the credit rating industry. Firstly, the Big Three clearly dominate the market and secondly, their ownership structure and range of services suggest that their operations are wholly for profit (Langohr and Langohr, 2010). Thirdly and lastly, CRAs' conformity bias as discussed in section 2.2 of this study signifies an interdependent relationship in which competitors lead and lag each other in making rating changes.

Therefore, as developed by mathematicians Jon von Neumann and Oskar Morgenstern in 1944 (Lipczynski *et al.*, 2005), game theory aids the understanding of decision making under conditions of uncertainty. To concur, Tirole (1989) adds that 'games' include an order of play, the information and the choices available to players

when it is their turn to play and the payoffs for all players contingent upon their choices. The rules of the game are defined by its players, actions and outcomes. The philosophies guiding the rules are the players, strategies, information and the desired equilibria (Lipczynski *et al.*, 2005). To explain further, the equilibrium referred to in game theory is the combination of actions that produce the best strategy to generate, for example, more rating fees for each player in the game. Together, 'the players, actions and outcomes define the rules of the game' (Waldman and Jensen, 2001:168), as well as their interactions. In the rating process, the order of play, information and choices of rating analysts as well as the possible actions and outcomes are geared towards the maximisation of rating fees. However, there is no direct data evidence in this study to suggest that rating analysts are themselves the strategists behind the competitive rating game.

Finally, the last factor to be discussed under the theme of notching for competition is the issuance of unsolicited ratings. Majority of respondents in this study support the notion that the issuance of unsolicited ratings is a market development or entry scheme. Respondent B is adamant that they 'know of a couple of cases where Moody's was using unsolicited ratings to bully their way into the market'. Similarly, Respondent H disclosed that 'unsolicited ratings are real and a threat that a rating agency can use...it has been done and I am not sure what you can do about it'. Like punitive ratings, unsolicited ratings are ratings issued without consent and primary data from the issuer. The difference between unsolicited ratings and punitive ratings is the remoteness of the issuer in the assignment of the rating. In other words, issuers may obtain punitive ratings in the process of shopping for ratings for various bond tranches. On the other hand, unsolicited ratings may be issued without any contact between issuers or underwriters and CRAs; this is based wholly on public

data. Indeed, to agree with Respondents B and H, Partnoy (1999) asserts that unsolicited ratings are a means to punish issuers for not requesting ratings. Similarly, White (2001) believes that unsolicited ratings are a moral hazard and an opportunistic behaviour because CRAs offer to upgrade issuer's ratings for a fee, or threaten to downgrade them without a fee.

Furthermore, the aggressive issuance of unsolicited ratings has sparked a regulatory response, firstly in the US and later in Europe. In the US, in 1996, the Department of Justice charged Moody's for antitrust violations following 'a rash of complaints about Moody's use of unsolicited ratings in the municipal world, capped by a 1996 lawsuit by Jefferson County School District of Colorado' (Riekmann *et al.*, 2004:247). As expected, the charge expounded that unsolicited ratings were anticompetitive and improperly exerted pressure on issuers to pay for ratings. However, due to Moody's claim to freedom of speech as enshrined in the first amendment of the US constitution, the Department of Justice dropped its charges in favour of encouraging the SEC to require CRAs to clearly label unsolicited ratings from solicited ratings.

Consequently, CRAs in the US have delineated solicited and unsolicited ratings since 1999 (Riekmann *et al.*, 2004). In Europe, on the other hand, unsolicited ratings have been listed on the central repository (CEREP) database since 2011 and new CRAs have mentioned that high market barriers leave them with no choice but to issue unsolicited ratings to develop their business (ESMA, 2015). In fact, interestingly, ESMA itself believes that 'issuing unsolicited ratings may be a good way for new entrants and SMEs to demonstrate the quality of their credit ratings and



allow them to gain the confidence of investors and issuers' (ESMA, 2015:79). As a result of this official backing, there is a high volume of unsolicited ratings by new CRAs in Europe but the degree to which they affect investors' decision making is not yet known. Also, it would be interesting to know whether new CRA's focus on unsolicited ratings using secondary information equips them for such a time when opportunities arise to deliver solicited ratings.

In conclusion, Respondent B believes that there is reason to object unsolicited ratings when they are used 'as a way of blackmailing the issuer into using ratings'. In a similar vein, Rousseau (2005) claims that antitrust liability is manifest in unsolicited ratings because they prevent new CRAs from procuring rating business in certain structured markets. Ultimately, the key findings in this theme on notching for competition are that the taking of haircuts and mapping of counterpart CRAs' ratings may lead to rating spreads. It has also been found that CRA's tendency to react to the actual and potential moves of competitors is a game theory behaviour aimed at maximising economic rents. This completes the discussion on the third theme on notching for competition. The next section will present a discussion on the fourth and final theme of tying.

## **6.5 The Drivers of Tying in the Rating Process**

The third question in this research is to explore the factors that motivate the alleged tying behaviour in the rating process. The 6 dimensions found under the tying theme introduced in section 5.6.4 are antitrust and ethics, business relationship and continuous dealing, covert negotiation, issuers' requests, ancillary services and regulatory overdependence. Just as in the previous theme, the dimensions to be

discussed here could not be classified into subjects but they combine well to convey the essence of the tying phenomenon in the data. Hence, the narratives and arguments are further discussed in the sections below.

In this first dimension under tying – antitrust and ethics, respondents maintained that any real attempt to condition the issuance on ratings on other services will be indicative of antitrust and unethical behaviour. Once more, by definition, tying is the practice of a seller conditioning the purchase of one product on the purchase of another product (Viscusi *et al.*, 2005). Hence, Respondent C notes that ‘tying was part of a long list of do nots in the company’s [S&P] conflict of interest management policy...we all knew that we could not set any conditions for issuing ratings’. Similarly, Respondent B stated that ‘tying is illegal between banks and issuers and I think it is unethical’. Furthermore, Respondent H asserted that tying was illegal and even a prisonable offence in the US because if ‘I tie a loan to some other service – that is a crime and I would go to jail for doing that’. Indeed, in US law, the sale of one product conditioned on another has been illegal for over 100 years (Bowman, 1957).

Nevertheless, the presence of monopoly power to control supply still creates the conditions necessary for tying to occur (ibid). Choi and Stefanadis (2001:1) affirm that ‘the idea that an incumbent supplier may tie two complementary products to fend off potential entrants is popular among practitioners’. To take a cue from other industries, instances of tying abound in the tying of salt to salt dispensers, the matching of ink cartridges to printers, or attaching tabulating cards to tabulating machines as practiced by IBM to mention a few examples. Therefore, in spite of the

stated illegality of the practice by respondents in this study, the oligopolistic power of the Big Three and the presence of complementary products in the rating process compelled the probing of the tying phenomena.

To discuss the second dimension in the theme of tying, some respondents hold that tying is the manifestation of continuous business dealing and not an exclusive or deliberate attempt by CRAs to command higher sales volumes. According to Respondent M 'tying is business as usual' whereas Respondent D asserts that:

it gets to be the kind of thing where the rating agency contact got to know the issuers well and hopefully, had a decent relationship with them, so you could see where over time there was just an assumption that they were going to continue working with them if things ran smoothly. It is like any business relationship.

Not surprisingly, the very nature of structured bond ratings lends itself to continuous dealing and the maintenance of mid to long term rating relationships. In the thoughts of Respondent N 'tying is a necessity in financial services especially with securities because you cannot open your books to several third parties at the same time'. This is further explained by the average life-span of structured bonds being anywhere between a few years to over a decade and such length of time warrants ongoing rating surveillance and diligence and this is a major element of protecting investors' interests (Feldstein and Fabozzi, 2011). The only drawback of this surveillance-induced continuous dealing, as the SEC reported, is that 'the surveillance processes used by the rating agencies appears to be less robust than the processes used for initial ratings' (Leonard, 2009:21). Therefore, business relationships that arise from continuous dealing may not be a driver of tying but they could create conditions that decrease the quality of ongoing ratings.

As far as the third element of the tying theme is concerned [covert negotiation], respondents allude to the possibility of hidden and informal arrangements in the rating process that may permit the conditioning of ratings on other services. While not being convinced that tying is a widespread problem, Respondent D thinks that 'there could be tying practices but I am not sure it would be explicit'. Indeed, the guarded and secretive nature of both the rating process and rating contracts adds credence to this mooted possibility. Ultimately, Respondent H yields that:

If I was an issuer and I wanted to influence a rating agency that [Tying] is certainly the kind of stuff I could talk about. I am not sure I would do it in a formal meeting, there are some conversations you have in formal meetings, some conversations you have in hallways, some conversations you have in the urinal in the bathroom, some conversations you have in restaurants and some conversations you have at the 16<sup>th</sup> hole of the golf course...there are all sorts of different places for all kinds of conversations and like any other serious profession having the right sort of conversation in the right place is half your job.

Although the above view from Respondent H is more hypothetical than factual, the view of Malik (2014:15) is that abuses like tying are possible because there is no evidence of 'a clear separation of consultation work from the negotiation of fees'. Therefore, 'they [CRAs] should no longer remain completely private' considering their important role in the regulatory framework (ibid). The thinking behind such calls for CRAs' disclosure of the rating process and rating contracts can be understood in light of market abuses and poor rating quality. However, in the interest of issuers, the confidentiality of the assets and liabilities in the rating process remains to be an integral part of the free market system. Even if CRAs want to, the confidentiality rules

of the European Central Bank, for example, will not permit them to specify the details of issuers and assets in the rating process and contract (Carmichael *et al.*, 2004). Therefore, there is cause to believe that a dispensation of disclosure in the rating process may undermine competition between issuers.

When examining the fourth factor identified by respondents in response to the tying question – issuers' requests, there is a suggestion that the practice could be triggered by issuers through underwriters and not exclusively by rating analysts. Respondent H cites that 'the issuers and financial institutions are the ones who might instigate tying'. Similarly, Respondent K mentions that 'we are tied to Moody's, S&P and Fitch because they understand our books better than other rating agencies'. These arguments dovetail with the continuous dealing and covert negotiation narratives. The closed nature of the rating process and the veil of confidentiality in rating contracts make it empirically difficult to assess the occurrence of tying driven by issuers' requests because respondents are unwilling and/or unable to disclose more information in this regard.

Next, the penultimate factor discussed in this section is the overreliance on ratings that the data suggests enables a kind of regulatory tying in the rating industry. As Respondent I recounts that 'tying is the result of market regulation', inferences abound in the literature on the quasi-regulatory roles that CRAs have come to play in the bond markets (Wright, 2012; Darbellay, 2013; Malik, 2014). Darbellay (2013:45) stresses that for regulatory purposes 'market participants are forced to rely on ratings'. Also, 'rating-based regulations give a regulatory privilege to certified CRAs

as opposed to non-certified CRAs' (ibid). Correspondingly, 'the incorporation of credit ratings into the regulatory framework of the Basel II Accord in 2004 considerably strengthened the role of CRAs as quasi-regulatory bodies' (Malik, 2014:13). It is also argued that the use of ratings is hardwired into financial regulation in the EU and US and on the international level it still persists in the Basel III framework<sup>64</sup> (Darbellay, 2013). Thus, Respondent I contends that 'nearly all international regulations are similar in requesting ratings from agencies of a particular profile and that profile suggests Moody's, S&P and Fitch whichever way you look at it'. The implication of this tying by regulation argument is that the exclusion of new CRAs from the market could be due to delegated regulation as opposed to any antitrust activities led by the incumbents.

The final factor discussed under the tying theme relates to ancillary services that respondents believe facilitate the occurrence of tying. The data has shown that, in addition to ratings, issuers and underwriters have unfettered access to desk based information services which permit informal contact with rating analysts outside the rating process. These ancillary services are simply CRAs' opinions on the impact of impending acquisitions, mergers or other activities on issuers' ratings. Notably, the informal nature of ancillary services blurs the 'demarcation line' that Sinclair (1994:138) believes is critical to independence and transparency in the rating process. At this point, it is opportune to revisit an extended finding from Respondent F [a former Moody's employee] thus:

in corporate finance they had a service that they charged \$5000 a phone call for.

And for that service, you effectively say you are a CFO of a company, you are

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<sup>64</sup> The Basel III framework 'has not yet proposed a new model to withdraw the regulatory use of ratings from capital requirement regulations' (Darbellay, 2013:197).

going to merge with or acquire another company and you are very worried that if you did that your rating would be affected and that would affect the value of the bonds held and you were going to sell new bonds to acquire the company so you would like the lowest cost of funds to do that. So you call the rating agency, you explain to them what you were going to do and then they would tell you their feelings on whether or not this would affect your rating and for that you charge \$5000. This is a kind of telephone consulting...usually the answer was no, it would not change your rating, go ahead you have my blessing and do not forget to send me a cheque.

To explain the above revelation from Respondent F, there is a high correlation between corporate ratings and structured ratings as issuers aim to attract credit on the best possible terms [structural subordination]. Thus, the presence of informal services around core ratings makes it possible for CRAs to benefit from the complementarity of corporate and structured ratings. On complementarity, Whinston (1990) cites a leverage theory that gives traction to tying processes wherein firms with an advantage in one market try to monopolise another market by sketching a relationship between services in both markets. Thus, it could be said that CRAs may leverage new markets with the current rating market. Furthermore, on the effect that this has on competition in the rating industry, Whinston (1990) is of the view that with economies of scale and strategic interaction, tying makes market rivals unprofitable by facilitating the foreclosure of tied goods sales by the firms with market power. Ultimately, it is the power of the incumbents in the rating industry that adds credence to the evidence of tying because issuers face the risk of unsolicited rating downgrades if they do not request these informal services. Also, following the view of

Whinston (1990), new CRAs are at a disadvantage because rating demands are seemingly 'foreclosed' by the ancillary services offered by the Big Three.

In conclusion, a key finding of this study on the theme of tying is that although the conditioning of rating services on ancillary services is illegal and unethical, respondents believe that, in the main, rating and ancillary services are exchanged on the basis of mutual and continuous understanding, and not by CRAs' coercion. In addition, respondents adjudge the long-term nature of structured debt issues and international regulations such as the Basel III framework to be key drivers of continuous dealing between the established CRAs and issuers. Finally, there is evidence that informal services like telephone consulting may create room for CRAs to tie corporate ratings to structured ratings. This summarises the discussion on the fourth theme on Tying. The current chapter has achieved its purpose of explaining how the findings in chapter 6 answer the research questions by presenting extracts from the data and developing an argument on how these findings fit with existing literature.

## **6.6 Conclusion**

In this chapter the findings on themes encasing the impediments of new CRAs, notching for risks, notching for competition and tying have been discussed in light of both the data and the literature. The next chapter will summarise this thesis and identify its contribution to knowledge, practice and public policy. It will also recognise the limitations of this study and recommend certain areas for future research.



## **CHAPTER SEVEN: CONCLUSION & FUTURE RESEARCH**

### **7.1 Introduction**

The purpose of this thesis has been to undertake an observation of agents in the rating process to understand the impediments of new CRAs in the rating industry and the drivers of notching and tying behaviours. Firstly, the findings show that certain market, regulatory and organisational factors impede the entry of new CRAs into the rating industry. Secondly, the findings show that notching is manifest in two forms: notching for risks and notching for competition and it is the latter which impedes new CRAs from entering into the market. Lastly, the findings show evidence of informal tying through rating arrangements outside the rating process as in the offering of informal and telephone consultancy services. Overall, the methodology of this research has followed a social-constructivist paradigm of inquiry and a strict application of thematic analysis as prescribed by Braun and Clarke (2006). Through thematic analysis, the study has been able to present the individual experiences of participants in the sample and to analyse the meanings ascribed to these experiences in light of the research questions. To bring the research to a close, this chapter now presents a final conclusion to the thesis and its contributions to knowledge, practice and policy. It will also outline its limitations and make suggestions for future research.

### **7.2 Conclusions of the Thesis**

This thesis demonstrates that an understanding of the nature of the rating process and the studied phenomena is better attained by a subjective social-constructivist epistemology as opposed to the objective positivism explored by Greenberg Quinlan Rosner Research (2002) and Carron *et al.* (2003). Indeed, the understanding of notching and tying demonstrated in this study is achieved by interpreting the actions,

interactions, thoughts and discourses of rating analysts and underwriters and explaining the reasons for their actions. Fundamentally, the choices made by rating analysts and underwriters are formed by the unique context of the rating process and the imperative of continuous interaction. Thus, the data for this study is collected in two stages of pilot interviews and then main interviews that are both semi-structured in design. In particular, the Braun and Clarke (2006) approach to thematic analysis that is adopted focuses on familiarisation with the data, generating codes, searching for themes, reviewing themes, defining themes and the production of a report in the discussion chapter.

Furthermore, in using this process of thematic analysis, the study has achieved its objective of determining the impediments of new CRAs entering into the rating industry and defining the distinct drivers of notching and tying behaviours in the rating process. Firstly, on the market impediments of new CRAs, it has been established that market barriers such as arbitrage, economic rents, investor preference and the issuer-pay model inhibit the growth of new CRAs. Also, regulatory barriers like discretionary regulation, new regulations and NRSRO designation make it difficult for new CRAs to compete in the market. Likewise, a combination of the organisational deficiencies of down-trading, meagre funding and systems, the lack of geographical spread, low added intellectual value, low independence and a narrow product and service scope also curtail the progress of new CRAs. Secondly, the drivers for anticompetitive notching found in the rating process are the taking of haircuts and mapping, the guise of protecting investors' interests, the issuance of punitive and unsolicited ratings and a quid pro quo rating norm. Finally, the drivers of anticompetitive tying are the maintenance of business

relationships and continuous dealing in the rating process, the terms of covert negotiations, the tendency of issuers to make repeated rating requests, the offering of ancillary services like telephone consultancy and lastly, the regulatory overdependence on credit ratings.

Finally, in contrast to previous studies by GQR (2002) and Carron *et al.* (2003), these findings are grounded in the experiences and narratives of rating analysts and underwriters in the definitive rating process and not based on the views of indiscriminate participants in debt finance.

### **7.3 Contributions to Knowledge, Practice and Policy**

This thesis advances the body of credit rating research at the theoretical and methodological levels and poses some implications to the practice and policies surrounding the issuance of debt security. These developments and questions are as summarised below.

Firstly, in examining prior literature, a gap in the knowledge on the status of new CRAs is identified. Previously, the impediments of new CRAs and the properties of notching and tying were only mooted but not expansively researched. In spite of the growing number of new CRAs and the interest of international bodies and regulators, the factors that confer ever-increasing market share to the Big Three were not systematically explored until now. Therefore, to advance the field of knowledge, it was timely to undertake a study with the dedicated objectives of expounding the impediments of new CRAs and contextualising the concepts of notching and tying by exclusively sampling market participants with first-hand experience and knowledge

of the issues. Through this extensive study, new knowledge on the organisational barriers that curtail new CRAs has been originated and a theoretical dichotomy on positive notching for risks and negative notching for competition can be added to the literature. Also, the conditions that accommodate tying behaviours in the rating process, particularly informal information and consultancy services, have been discovered.

Secondly, the assimilation of a social-constructivist epistemology made the achievement of the research objectives possible where previous studies were 'inconclusive' and 'unresolved' with a positivist approach (Frost, 2006). A social-constructivist epistemology facilitated the flexibility in the thematic analysis technique to respond to the elusive nature of the phenomena of notching and tying in the rating process. The collection of data through semi-structured interviews and the subsequent thematic analysis is the first of any study examining the phenomena of notching and tying and it enabled the development and identification of subjective factors to substantiate the theoretical framework. Hence, this research breaks new methodological ground and charts new methods for credit rating researchers with interest in the rating process.

Thirdly, an implication for the rating practice posed by this study is the need for clarity on CRAs' haircut and mapping calculation models in the notching process. Currently, European legislation obliges CRAs to use internally developed models to map counterpart ratings (ESMA, 2015). In the alternative, the recommendation of a standardised mapping model will harmonise notching practices, reduce the rating variance between all CRAs, promote the analytical competence of new CRAs and

make ratings more informative and valuable to financial consumers. This is practicable because in internal rating assessments, regulators have set the parameters for the calculation of probability of default and the loss given default (Conte and Parmeggiani, 2008).

Fourthly, on the implications for financial policy in Europe and beyond, it is recommended that notched ratings be supplemented with an analytical report that advises investors on the real probability of default. Also, in the interest of increased competition, international regulatory authorities may agree to a harmonised convention on CRA recognition that may lead to the emergence of new robust CRAs. Currently, the Basel III framework, ESMA, the IOSCO and the SEC have inconsistent definitions of what entities may qualify as a credit rating agency. It is also of interest to policy makers to know that continuous dealing between issuers and CRAs over the life-span of a debt issue lessens the quality of credit ratings. Therefore, there is an urgent need to legislate in favour of multiple surveillance ratings over the life-span of a debt issue.

Finally, the evidence of notching for competition and tying through informal services demonstrated in this study substantiates antitrust liability for possible antitrust intervention. The inherent findings fulfil the conditions for applying article 101 and 102 of the TFEU and may be tantamount to the elusive competition law offences that Petit (2011) intimates.

#### **7.4 Limitations of the Study**

There are three shortcomings of this research that have been identified and they relate to the sample size, self-reported data and restrained access to sample population.

Firstly, although the sample in this study is representative of the population of rating analysts and underwriters in contact with big and new CRAs, the sample size of 15 respondents could be considered as moderate. This is due to a lack of willingness among participants with requisite experience to participate in the study and the discriminate selection of the sample on the basis of direct experience in the rating process. Also, majority of the population of respondents are unwilling to participate for reasons of confidentiality and job security. Nonetheless, as previously stated, 15 respondents surpass previous credit rating studies (Duff and Einig, 2009; 2015). In addition, as the challenges of attracting participants in financial services are well known, most studies have instead relied on secondary data and positivist inquiries with limited success. However, on the research questions probed in this study, data saturation is still achieved as new information could not be obtained from the participants and further coding in the NVivo 10 CAQDAS is also not feasible (Guest *et al.*, 2006).

Secondly, it is impossible to isolate the biases of respondents and independently verify the claims made in the semi-structured interviews conducted for this study. To offset this limitation, the investigator was alert to respondents' selective memory, telescoping, attribution and exaggeration and narrated the data transcripts to respondents at the close of interviews to validate their responses.

Lastly, the volume of data in this study would have been greatly improved by unrestrained access to CRAs and debt issuing institutions. In the end, although maximised, efforts to network with more rating process participants within the timeframe of this research could not have been more successful.

## **7.5 Suggestions for Future Research**

The findings in this thesis reflect evidence in the rating process as reported by the sample population but there is future potential for positivist research to expand on the sample size and to adopt the dimensions in the main and sub-themes as variables in parametric studies.

Furthermore, it will be interesting for future studies to determine whether the de-emphases on external credit ratings in the US have reduced the assignment of ratings per bond issue. If verified, this will be indicative of the changing size and structure of the rating market and the outlook for big and new CRAs to survive in the long term.

Also, considering the high volume of unsolicited ratings in Europe following ESMA's endorsement of the practice in the region, it will be interesting for new studies to determine the effect of unsolicited ratings issued by new CRAs on the investment decisions on investors. The results from such studies will demonstrate the influence of new CRAs in the market, if any.

To conclude, future studies may also consider the extent to which down-trading into other business areas incur opportunity costs to new CRAs vis-à-vis the

organisational learning and economies of information that are needed to offset the dominance of Moody's, S&P and Fitch.



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## **APPENDICES I – X**

**(Overleaf)**

## **APPENDIX I**

### **Interview Questions for:**

‘A Thematic Analysis of Competitive Behaviour in the Credit Rating Process’

### **Introduction**

Before we proceed, do I have your consent to voice record this interview?

1. Would you like to start by telling me a little about yourself?
  - a. Background and Employment history
  - b. Education
  - c. Job title
2. Can you tell me about the debt finance projects you have been involved in?
3. What kinds of securities have you dealt with in the past? (For example ABS, CDOs, CMBS, RMBS etc.)
4. What is your impression on the state of competition in the credit rating industry? (Competition in terms of the number of existing players and the entry of new agencies).
5. In your view, do you think the rating industry is dominated by a few players and would you like to see more credit rating agencies in the market?
6. How would you attract issuers to get their bonds rated by you? (For Rating Analysts)

Or

How would you select CRAs to rate your bonds? (For Underwriters)

### **Notching (Research Question 1)**

7. Would you accept specific instructions to rate only selected bonds within a pool of securities, or would you exercise discretion and rate the whole pool? (For Rating Analysts)

Or

Would you request a rating agency to rate only selected bonds within a pool of securities and would they comply with that request? (For Underwriters)

8. How would you rate secured and unsecured bonds within the same pool of securities? (For Rating Analysts)

Or

Do you receive different ratings for secured and unsecured bonds within a pool of securities? (For Underwriters)

9. How would you rate senior and subordinate tranches within the same pool of securities? (For Rating Analysts)

Or

Do you receive similar ratings for senior and subordinate tranches within the same pool of securities? (For Underwriters)

10. When rating a pool of securities, do you factor into your decision making the ratings for underlying assets provided by counterpart rating agencies? (For Rating Analysts)

Or

When presenting a pool of securities for rating, do you present some securities with underlying assets that have been rated by counterpart rating agencies?  
(For Underwriters)

### **Tying (Research Question 2)**

11. Now let us talk about your experience in the rating process. How does the rating process work?

12. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers? (For Rating Analysts)

Or

Besides ratings, what other dealings (services) do you have (receive from) with rating agencies? (For Underwriters)

13. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)? (For Rating Analysts)

Or

Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies? (For Underwriters)

14. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers? (For Rating Analysts)

Or

Do you receive additional services like consultancy and risk assessments from rating agencies? (For Underwriters)

15. Do you have knowledge of future bonds to be sold by your clients – the bond issuers? What knowledge do you have? (For Rating Analysts)

Or

Are the rating agencies you deal with aware of the bonds you intend to issue for your clients in the future? Do you disclose this information to them? (For Underwriters)

16. How would you describe your relationship with bond issuers? (For Rating Analysts)

Or

How would you describe your relationship with rating agencies? (For Underwriters)

### **Conclusion (Research Questions 1 and 2)**

What is your impression on unsolicited ratings, notching and tying?

***Unsolicited Ratings:*** When CRAs issue ratings on bonds issued by an obligor without being requested to do so by that obligor.

***Notching:*** When CRAs downgrade ratings for bonds that they have not initially rated

***Tying:*** When CRAs condition the issuance of ratings on the provision of future ratings, or other ancillary services like consultancy and risk assessment.

17. What is your impression on notching?

18. What is your impression on tying?

### **Further Questions (Time Permitting)**

In most industries there is an implied market discipline that guides the actions of market participants. For example, in the hospitality industry, restaurant and hotel ratings are information signals to the extent that good ratings attract guests and vice-versa.

19. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?
20. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?

21. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?
22. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?

**Notching, Tying and Market Discipline (Research Question 4)**

23. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?
24. Is it desirable for the state to intervene in increasing competition in the rating industry?



## APPENDIX II

### Pilot Test Interview Questions for Rating Analysts:

'A Thematic Analysis of Competitive Behaviour in the Credit Rating Process'

#### Introduction

Thank you for participating in this research.

Before we proceed, do I have your consent to voice record this interview?

You are participating in our research because you have experience in the rating process for bonds or other securities. Would you like to start by telling me a little about yourself? Your background, your education, your employment history, your job title, as well as the projects you have been involved in?

2. What kinds of securities have you dealt with in the past? (ABS, CDOs, CMBS, RMBS etc.)
3. What is your impression on the state of competition in the credit rating industry? (Competition in terms of the number of players and the entry of new players).
4. In your view, is the rating industry a monopoly, duopoly, oligopoly, or is there perfect competition?
5. In your view, why is the rating industry dominated by Moody's, Standard & Poor's and Fitch?
6. Would you like to see more credit rating agencies in the market?
7. How do you attract issuers to get their bonds rated by you?
8. There is a perception that individually, the big three CRAs, Moody's, Standard & Poor's and Fitch behave in certain ways to maintain their market dominance. For instance, three practices of Notching, Tying and Unsolicited Ratings have been attributed to them. Are you aware of these practices?

**Notching:** When CRAs offer lower ratings for bonds or securities not initially rated by them.

**Tying:** When CRAs condition the issuance of ratings on the provision of future ratings, or other ancillary services like consultancy and risk assessment.

**Unsolicited Ratings:** When CRAs issue ratings for bonds or to an institution without being requested to do so by that institution.

9. What is your impression on notching?
10. In the same way, what is your impression on tying?
11. Now let us talk about your experience in the rating process and how it works.

*The textbook understanding is that the rating process is roughly a six to eight stage process. The first stage is the making of an agreement by the rating agency and the bond issuer. The second stage is a preliminary management meeting between the rating agency and the bond issuer (CEOs and CFOs). The third stage is the compilation of quantitative and qualitative information by the rating agency. The fourth stage is the actual management meeting between the rating agency and the bond issuer (CEO and CFOs) to discuss the important issues. The fifth stage, if necessary, is a post meeting follow-up to verify or collect additional information. The sixth stage is the rating committee of analysts meeting behind closed doors to decide a rating. The seventh stage is the disclosure of the rating to the bond issuer and barring any displeasure or appeals, it ends in an eighth stage which is notifying the market of the assigned rating.*

Is this how it works in your experience?

12. In your preparation for management meetings, what kind of information would you be interested in as an analyst?
13. Have you ever had a rating appealed by an issuer? How did you respond?
14. Have you ever issued unsolicited ratings and had the issuer request solicited ratings later on? Did they generally receive higher ratings? Why so?
15. Why did you issue unsolicited ratings?
16. Do you often get requests to rate just one or a few tranches of debt instruments within a large pool of securities? Do you rate just the tranches requested, or go on to rate the whole pool of securities anyway? Why do you rate the whole pool? Do the supplementary tranches rate as high as the main tranches you were requested to rate?
17. Would you discuss possible future rating transactions and possible consultancy services during the rating process, perhaps at the second and fourth stages – at the preliminary and actual management meetings?
18. Besides ratings, what other dealings do you have with bond issuers? Do you initiate these dealings with bond issuers or are they initiated by bond issuers?
19. How would you describe your relationship with debt issuers? Is it a relationship based on one rating transaction or one based on repeated rating transactions?
20. Supposing notching and tying were real practices, would these be barriers to new CRAs entering the rating industry?
21. In most industries there is an implied market discipline that guides the actions of market participants. For example, in the hospitality industry, restaurant or hotel ratings are information signals to the extent that good ratings attract guests and vice-versa. Why do you think the rating industry is different, in that poor rating

performance does not lead to a reduction in rating requests, especially for the big three?

22. Do you have any comments to add to this interview, or any opinions to share on the state of competition in the rating industry?
23. Do you have any questions that you think might improve this interview?
24. Finally, would you be kind enough to recommend some of your acquaintances to partake in this research?

## **APPENDIX III**

### **Pilot Test Interview Questions for Underwriters:**

‘A Thematic Analysis of Competitive Behaviour in the Credit Rating Process’

#### **Introduction**

Thank you for participating in this research.

Before we proceed, do I have your consent to voice record this interview?

1. You are participating in our research because you have professional experience in the rating process for bonds or other securities. Would you like to start by telling me a little about yourself? Your background, your education, your employment history, your job title, as well as the projects you have been involved in?
2. What kinds of securities have you dealt with in the past? (ABS, CDOs, CMBS, RMBS etc.)
3. You are obviously very familiar with the rating industry. What is your impression on the state of competition in the credit rating industry? (Competition in terms of the number of players and the entry of new players).
4. In your view, is the rating industry a monopoly, duopoly, oligopoly, or is there perfect competition?
5. Would you agree that the rating industry is dominated by Moody's, Standard & Poor's and Fitch?
6. Some scholars believe that the rating industry is a natural oligopoly at best. They say it is a natural oligopoly because of forces hindering competition like reputation, NRSRO certification and directives in international agreements like the Basel accords among other factors. Do you agree that the rating industry is a natural oligopoly and why?
7. In your view, why is the rating industry dominated by Moody's, Standard & Poor's and Fitch?
8. Would you like to see more credit rating agencies in the market? Why?
9. How do you select CRAs to rate your bonds?
10. There is a perception that individually, the big three CRAs, Moody's, Standard & Poor's and Fitch behave in certain ways to maintain their market dominance. For instance, three practices of Notching, Tying and Unsolicited Ratings have been attributed to them. Are you aware of these practices?

**Notching:** When CRAs offer lower ratings for bonds or securities not initially rated by them.

**Tying:** When CRAs condition the issuance of ratings on the provision of future ratings, or other ancillary services like consultancy and risk assessment.

**Unsolicited Ratings:** When CRAs issue ratings for bonds or to an institution without being requested to do so by that institution.

11. What is your impression on notching generally?
12. In the same way, what is your impression on tying?
13. Now let us talk about your experience in the rating process and how it works.

*The textbook understanding is that the rating process is roughly a six to eight stage process. The first stage is the making of an agreement by the rating agency and the bond issuer. The second stage is a preliminary management meeting between the rating agency and the bond issuer (CEOs and CFOs). The third stage is the compilation of quantitative and qualitative information by the rating agency. The fourth stage is the actual management meeting between the rating agency and the bond issuer (CEO and CFOs) to discuss the important issues. The fifth stage, if necessary, is a post meeting follow-up to verify or collect additional information. The sixth stage is the rating committee of analysts meeting behind closed doors to decide a rating. The seventh stage is the disclosure of the rating to the bond issuer and barring any displeasure or appeals, it ends in an eighth stage which is notifying the market of the assigned rating.*

Is this how it works in your experience?

14. In your preparation for management meetings, what kind of information would you be interested in as a bond issuer?
15. Have you ever appealed an assigned rating? What did your appeal result to?
16. Have you ever received unsolicited ratings from a CRAs and then request solicited ratings from the same CRA? Did you receive higher ratings? Why so? Did you get an explanation?
17. Why did you request ratings from the same CRA that issued you an unsolicited rating? Have you ever received different ratings from CRAs at the same time for a bond and why?
18. Do you request CRAs to rate just one or a few tranches of debt instruments within a large pool of securities? Do they rate just the tranches requested or go

on to rate the whole pool of securities anyway? Why do they rate the whole pool? Do the supplementary tranches rate as high as the main tranches you requested to be rated?

19. During the rating process, perhaps at the second and fourth stages which are the preliminary and actual management meetings, would you discuss bond issues that may arise in the future and the support that you might need from CRAs to bring these bonds to market? Like consultancy services, risk assessments and the likes of?
20. Besides ratings, what other dealings do you have with rating agencies? Do you initiate these dealings or are they initiated by rating agencies?
21. How would you describe your relationship with rating agencies? Is it a relationship based on one rating transaction or one based on repeated rating transactions?
22. Supposing notching and tying were real practices, would these be barriers to new CRAs entering the rating industry?
23. In most industries there is an implied market discipline that guides the actions of market participants. For example, in the hospitality industry, restaurant and hotel ratings are information signals to the extent that good ratings attract guests and vice-versa. Why do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests, especially for the big three?
24. Do you have any comments to add to this interview, or any opinions to share on the state of competition in the rating industry?
25. Do you have any questions that you think might improve this interview?
26. Finally, would you be kind enough to recommend some of your acquaintances to partake in this research?

## **APPENDIX IV**

Adah-Kole Onjewu

PGR Student

Faculty of Business

Ref: FoB/UPC/FREC/FREC1415.18/clc

Date: 12 February, 2015

Dear Adah-Kole

**Ethical Approval Application No: FREC1415.18**

**Title: Notching and Tying in Competition Among Credit Rating Agencies: An International Study**

The Faculty Research Ethics Committee has considered the revised ethical approval form and is now fully satisfied that the project complies with Plymouth University's ethical standards for research involving human participants.

Approval is for the duration of the project. However, please resubmit your application to the committee if the information provided in the form alters or is likely to alter significantly.

We would like to wish you good luck with your research project.

Yours sincerely

*(Sent as email attachment)*

Dr James Benhin

**Chair**

**Faculty Research Ethics Committee**

**Faculty of Business**

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## APPENDIX V

### Initial Memo from Thematic Analysis Stage 1

- There is growing competition from smaller agencies trying to enter into the rating industry. However, Moody's and S&P still dominate the market with Fitch as a noteworthy but outside player.
- European regulation encourages but does not mandate the use of new CRAs. Thus, there is no commercial or regulatory incentive for underwriters to engage new CRAs.
- New CRAs use the old rating methods of the status quo.
- New and old CRAs compete for a finite/limited market share, or a small piece of the pie and the rating product is a narrow one that does not accommodate new niches.
- The Big Three possess reputational capital and first mover advantage in the developed capital markets. And they thrive because of investors' 'habit' to engage them.
- Moody's and S&P dominate the market because of their greater geographical spread and knowledge of local markets, as well as their superior knowledge and expertise in structured, corporate and sovereign ratings.
- The Big Three face competition in niche markets like insurance but not in the main capital markets.
- New CRAs do not offer distinctive value other than price and pose the risk of creating new rating systems.
- New CRAs lack the operational independence that the established Big Three possess.
- Institutions feel obliged to possess two ratings for the issuance of debt.
- Underwriters select CRAs on pre-determined criteria which may be internally communicated. These criteria include investor preference with the highest weighting, as well as technical sophistication, time and resource availability and previous ratings.
- CRAs are generally and increasingly under public and regulatory scrutiny and could not be held legally liable for the information that they publish.
- There is an active revolving door between old and new CRAs.
- The current business model of CRAs is unsustainable and creates a barrier to new CRAs.



- The Big Three CRAs are inundated with demand for ratings and therefore invest little or nothing in marketing activities.
- Rating Analysts do not engage in marketing or promotional activities. This is strictly undertaken by the Business Development or Business Cultivation Team. However, rating analysts may be engaged in activities that cultivate interest in ratings like, for example, making presentations to issuers.
- Rating analysts do not negotiate and have no knowledge of rating fees.
- The motivation for underwriters seeking ratings for only selected bonds is arbitrage.
- Secured/senior tranches of securities may be rated while unsecured/junior tranches may be unrated but still offered to investors who are willing to take the risk in return for a higher pay out.
- Rating analysts seek clarification on requests to rate selected bonds and their discretion to rate whole pools transcends such requests.
- Rating analysts routinely exercise discretion and rate all the bonds in a pool regardless of underwriters' instructions.
- Secured bonds/superior tranches would normally rate higher than unsecured bonds/subordinate tranches.
- A key variable to assigning ratings is the loss given default characteristics (or recovery rate) of secured and unsecured bonds, as well as senior and subordinate tranches.
- All things being equal, secured bonds will have higher ratings than unsecured bonds.
- It is typical for CRAs not to recognise ratings assigned by counterpart agencies and to rerate the assets especially when they were a large chunk of the pool. If they were a smaller chunk, then the assets will be downgraded by one or a few notches - this is also known as mapping. Similarly, Moody's and S&P automatically downgrade counterpart ratings in the rating process.
- Notching is a common practice among the Big Three but Fitch is most affected by punitive notching because of its relegated position in the oligopoly.
- Exit ratings are a clause aimed at curbing ratings shopping.
- Smaller issuers feel more victimised by exit ratings than big issuers who have double ratings.
- S&P is supposedly more keen on the exit rating clause.

- CRAs offer other services in addition to ratings but rating analysts do not initiate or promote these services.
- During the rating process it is typical for rating analysts to obtain information about future debt to be issued by underwriters.
- Ancillary services provide opportunities for issuers to influence CRAs in order to obtain inflated ratings.
- Possible notching and tying behaviours may occur outside of the rating process but in informal conversations and settings (like the golf course and the bathroom).
- Rating analysts and underwriters maintain a largely formal and professional relationship
- Notching counterpart ratings is a commonly understood and mutual practice in the rating industry.
- Notching is not an impediment to competition in the rating industry but tying is an impediment if proven.
- Notching may occur through the issuance of unsolicited ratings.
- The big CRAs have been proactive in developing their business advisory and consultancy services that are firewalled from rating services.
- Moody's offers a telephone consulting service on how the potential actions of clients could affect their ratings and may charge up to \$5,000 for this service.
- Tying is also known as 'rating dependency' and is an outlawed practice at S&P because it has the potential to accommodate conflict of interest.
- Tying, if proven, is not a widespread practice.
- Tying, if proven, is an illegal practice.
- Tying is the addition of issuers to the Big Three that is caused by existing regulation.
- Tying is merely repeated business or continuous dealing and is mutually triggered by CRAs and underwriters.
- Respondents are split on the idea that notching and tying are barriers to the rating industry but they agree that the intentions behind both phenomena are easily denied.
- About a third of respondents had no idea of Tying as a practice.
- Rating contracts include clauses for an annual review and exit ratings.

- Issuers tend to withdraw ratings when there is no commercial benefit in holding the rating, or when they possess multiple ratings and seek to save money by reducing the number of ratings held.
- The exit rating clause may be triggered for securities coming to the end of their cycle, or for securities being refinanced.
- Issuers voluntarily or inadvertently offer information on future debt issuance in the rating process and can access a service that calibrates various scenarios and how they will impact on their debt and corporate ratings.
- Underwriters are concerned by the high turnover and inexperience of rating analysts
- Rating analysts oversee a portfolio of issuers and would interact with a contact at the underwriters at least once a quarter or as frequent as necessary.
- Unsolicited ratings are issued in the interest of investors.
- Rating models before the 2008 financial crisis were not robust enough and led to inflated ratings.
- Bureaucracy at the SEC and ESMA may constitute barriers to new CRAs entering the industry.
- If proven, notching and tying constitute a barrier to competition in the rating industry.

## APPENDIX VIII

The screenshot displays the NVivo 10 software interface for a project named 'CRA COMPETITION RESEARCH.nvp'. The left sidebar shows the 'Sources' pane with 'Internals' selected. The main window is divided into two sections: a table of 'Internals' and a text entry area for 'Initial Thoughts and Ideas'.

Name	Nodes	References	Created On	Created By	Modified On	Modified By
Respondent A - Rating Analyst	0	0	20/08/2015 10:39	A ONJEWU	18/05/2016 12:39	A ONJEWU
Respondent B - Rating Analyst	0	0	20/08/2015 10:39	A ONJEWU	18/05/2016 23:58	A ONJEWU
Respondent C - Rating Analyst	0	0	20/08/2015 10:39	A ONJEWU	01/06/2016 13:53	A ONJEWU
Respondent D - Rating Analyst	0	0	20/08/2015 10:39	A ONJEWU	20/01/2016 23:51	A ONJEWU
Respondent E - Rating Analyst	0	0	20/08/2015 10:39	A ONJEWU	01/06/2016 18:12	A ONJEWU
Respondent F - Rating Analyst	0	0	20/08/2015 10:39	A ONJEWU	01/06/2016 23:41	A ONJEWU
Respondent G - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	02/06/2016 13:56	A ONJEWU
Respondent H - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	02/06/2016 15:24	A ONJEWU
Respondent I - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	02/06/2016 16:15	A ONJEWU
Respondent J - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	02/06/2016 16:34	A ONJEWU
Respondent K - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	02/06/2016 16:48	A ONJEWU
Respondent L - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	03/06/2016 13:55	A ONJEWU
Respondent M - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	03/06/2016 14:20	A ONJEWU
Respondent N - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	20/01/2016 23:52	A ONJEWU
Respondent O - Underwriter	0	0	20/08/2015 10:39	A ONJEWU	20/01/2016 23:52	A ONJEWU

The 'Initial Thoughts and Ideas' section contains the following text:

There is growing competition from smaller agencies trying to enter into the rating industry. However Moody's and S&P still dominate the market with Fitch as a noteworthy but outside player.

European regulation encourages but does not mandate the use of new CRAs. Thus, there is no commercial or regulatory incentive for underwriters to engage new CRAs.

New CRAs use the old rating methods of the status quo.

### MEMOING, INITIAL THOUGHTS AND IDEAS IN NVIVO 10 CAQDAS

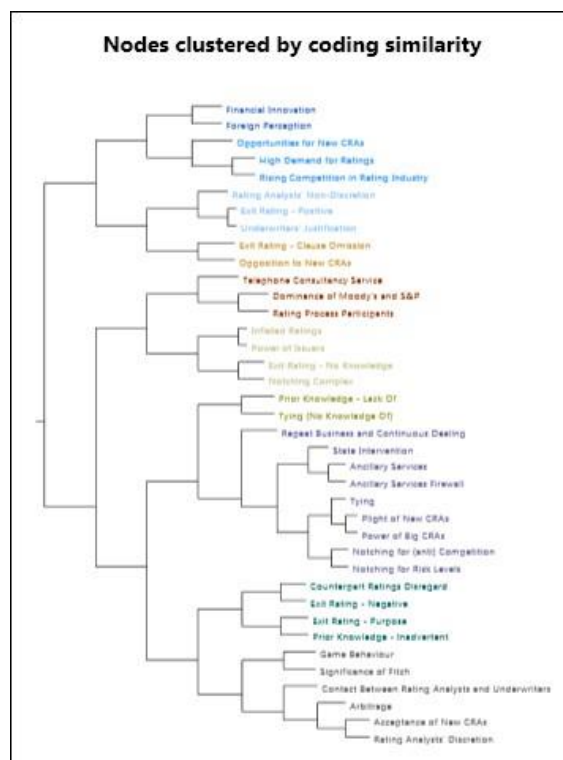
## APPENDIX IX

Name	Sources	References	Created On	Created By	Modified On	Modified By
Acceptance of New CRAs	9	13	04/06/2016 17:42	A ONJEUW	06/06/2016 21:22	A ONJEUW
Ancillary Services	10	20	04/06/2016 16:24	A ONJEUW	06/06/2016 19:54	A ONJEUW
Ancillary Services Firewall	8	18	04/06/2016 16:25	A ONJEUW	06/06/2016 19:17	A ONJEUW
Arbitrage	8	9	04/06/2016 18:02	A ONJEUW	06/06/2016 21:24	A ONJEUW
Contact Between Rating Analysts and Underwriters	5	14	04/06/2016 18:31	A ONJEUW	19/06/2016 16:57	A ONJEUW
Counterpart Ratings Disregard	4	6	04/06/2016 16:15	A ONJEUW	05/06/2016 18:23	A ONJEUW
Dominance of Moody's and S&P	2	2	04/06/2016 15:57	A ONJEUW	05/06/2016 16:57	A ONJEUW
Exit Rating - Clause Omission	2	2	04/06/2016 16:20	A ONJEUW	19/06/2016 16:47	A ONJEUW
Exit Rating - Negative	4	4	04/06/2016 16:23	A ONJEUW	19/06/2016 16:47	A ONJEUW
Exit Rating - No Knowledge	4	4	04/06/2016 18:25	A ONJEUW	06/06/2016 17:27	A ONJEUW
Exit Rating - Positive	2	2	04/06/2016 16:22	A ONJEUW	19/06/2016 16:48	A ONJEUW
Exit Rating - Purpose	9	15	04/06/2016 16:19	A ONJEUW	19/06/2016 16:48	A ONJEUW
Financial Innovation	2	3	04/06/2016 16:00	A ONJEUW	04/06/2016 16:45	A ONJEUW
Foreign Perception	1	1	04/06/2016 17:47	A ONJEUW	04/06/2016 17:47	A ONJEUW
Game Behaviour	5	5	04/06/2016 16:16	A ONJEUW	06/06/2016 19:20	A ONJEUW
High Demand for Ratings	4	5	04/06/2016 16:03	A ONJEUW	05/06/2016 14:58	A ONJEUW
Inflated Ratings	1	1	06/06/2016 16:07	A ONJEUW	06/06/2016 16:07	A ONJEUW
Notching Complex	4	7	04/06/2016 18:45	A ONJEUW	06/06/2016 18:11	A ONJEUW
Notching for (anti) Competition	13	34	04/06/2016 16:31	A ONJEUW	06/06/2016 21:31	A ONJEUW
Notching for Risk Levels	14	39	04/06/2016 16:12	A ONJEUW	06/06/2016 21:29	A ONJEUW
Opportunities for New CRAs	6	12	04/06/2016 16:44	A ONJEUW	06/06/2016 21:07	A ONJEUW
Opposition to New CRAs	6	8	04/06/2016 16:01	A ONJEUW	06/06/2016 21:07	A ONJEUW
Plight of New CRAs	13	70	04/06/2016 16:42	A ONJEUW	06/06/2016 21:07	A ONJEUW
Power of Big CRAs	14	42	04/06/2016 16:51	A ONJEUW	06/06/2016 21:23	A ONJEUW
Power of Issuers	1	7	06/06/2016 16:18	A ONJEUW	06/06/2016 18:18	A ONJEUW
Prior Knowledge - Inadvertent	8	9	04/06/2016 16:28	A ONJEUW	06/06/2016 20:45	A ONJEUW
Prior Knowledge - Lack Of	4	5	05/06/2016 15:06	A ONJEUW	19/06/2016 16:53	A ONJEUW
Rating Analysts' Discretion	9	15	04/06/2016 16:04	A ONJEUW	06/06/2016 21:24	A ONJEUW
Rating Analysts' Non-Discretion	1	1	05/06/2016 14:14	A ONJEUW	05/06/2016 14:14	A ONJEUW
Rating Process Participants	1	1	05/06/2016 17:52	A ONJEUW	05/06/2016 17:52	A ONJEUW

38 CODES IN THE NVivo 10 CAQDAS

## Appendix X

### Cluster Analysis of Codes (generated in the NVivo 10 CAQDAS)



## Appendix XI - Data

### Respondent A

#### Transcript for CRAs

**1. Background and experience**

Credit Analyst for Structured Finance at Commerzbank 2004 – 2006

Vice-President and Senior Credit Manager at Moody's 2006 - 2015

**2. Education**

Bachelors in French. Masters in Engineering, University of Bristol.

**3. Job Title**

Vice-President

**4. Projects Involved In**

Securitisations, Financial Modelling and Structured Finance

**5. Securities Dealt With**

CLOs, RMBS, CMBS, ABS etc.

**6. Impression on Competition in CRA Industry**

We are finding more congestion around us these days. We and Standards and Poor's are still market leaders, but issuers are having more agencies to select from. Obviously Fitch has always been a strong competitor.

**7. Is the CRA industry dominated by a few players?**

Yes, you can say that but the environment is changing. I cannot predict where we will be in 5 – 10 years. Our dominance depends on the financial products that the market produces over time, so our mission is to make sure that we have the resources to provide the best ratings for the next big thing.

**8. Would you like to see new CRAs in the market?**

It is only natural for us to protect our corporate interest, but we do not do anything to stop new CRAs from getting in. That will be super powerful.

**9. How would you attract issuers to get their bonds rated by you?**

We are swamped with requests; we do not invest that much in marketing. We invest more in relationship management and providing ongoing support to existing clients. Our service is essential to bond issues because the interest rate on their debt securities depends on our ratings. A high credit rating for an issuer means low interest rate on debt finance.

**10. Would you accept specific instructions to rate only selected bonds within a pool of securities, or would you exercise discretion and rate the whole pool?**

We have our internal code of conduct. We take every instruction and will ask bankers to explain the reason behind such a request. However, in the end we always use our discretion. Bonds are in a pool for a particular reason, usually because they are secured by common assets. Our role is to diagnose bleeding anywhere in the pool that could cause the default of the individual or collection of bonds.

**11. How would you rate secured and unsecured bonds within the same pool of securities?**

Investors of unsecured bonds have full faith in the facility based on the investment information made available to them. I will expect bankers to make the same information available to me to understand the logic of that faith. Our methodologies identify the structure of secured and unsecured bonds and so depending on the provisions of a structure you could have mixed ratings. Do not imagine that unsecured bonds will always rate lower than secured bonds. It could be the reverse; it is all about the structure and viability of their individual provisions.

**12. How would you rate senior and subordinate tranches within the same pool of securities?**

You are talking about the allocation of risks. Interest and principal payment to senior tranches ahead of subordinate tranches is needed to maintain the pool structure. Similar to the previous question, we will study the individual provisions to assign ratings to various tranches.

**13. When rating a pool of securities, do you factor into your decision making the ratings for underlying assets provided by counterpart rating agencies?**

We will only recognise Moody's ratings, not those of counterpart agencies. We cannot take responsibility for counterpart ratings even if we wanted to. It might come back to bite us. I also wouldn't think that S&P for example will routinely adopt our ratings. You may attribute this to market rivalry but it is more complex than that I would argue.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

This is how the process works. An issuer will approach us through an underwriting bank and then we give them a rating application form to complete. Once they turn it in we decide what is required and the number of analysts to assign to the case which is typically two, a lead analyst and an associate but it could be more than two if scale demands. At this stage we collect various files from the issuers detailing the provisions of the structure and then call for a management meeting with the issuers in attendance. We make sure we have all the material evidence needed to make an effective decision ahead of the analysis stage. After the analysis we convene our ratings committee to review the decision with other analysts and our directors. Next, we will inform the issuer of the rating before making a press release. This is a simple description but many times we go zigzagging asking for important materials before we come full circle.

**15. Tell me about the exit rating clause in rating contracts?**

The purpose of the exit rating clause is to police unfair ratings shopping and imprudence on the part of issuers. We feel that issuers should commit to periodic reviews for the lifespan of the security, or for as long as they hold the commitment of investors. Normally the clause is omitted if there is no long term dimension to the instrument. I would have to look at the records and do some analysis of my own to tell you for sure whether exit ratings are routinely lower than pre-exit ratings. From the top of my head I can remember issuers with better exit ratings but with a genuine need to break their rating contract with us to attract new investors or enhance the securitisation. I can also remember some grim situations but we have a job to



do and that is to provide merit ratings point in time and periodically. So I probably wouldn't say that there is a fixed strategy on our part to downgrade all exit ratings whatever the records show.

**16. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers?**

Ratings are just one aspect of Moody's. We have other products for bond pricing and valuation as well as certificate training for the financial services generally. Anybody is allowed to purchase these, we have no reason to bar issuers and we do not force it on them. Besides, we have other departments selling these services and not rating analysts, we are already very busy. I will not be able to tell you whether the bond issuers I have dealt purchase any of these services. I don't even have that information because I do not need it.

**17. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)?**

The services are offered to the sector as a whole, and not to selected issuers. The responsible departments have their targets in that area to support the group's bottom line.

**18. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers?**

You will be amazed at the range of services we provide to the market. Nearly 10,000 people work at Moody's globally and they are not all credit analysts. We have colleagues in research, liquidity management, economic development, emerging markets, forecasting and many other areas. So of course issuers find our consultancy and risk assessment services useful. We cannot deny them these services if they request them.

**19. Do you have knowledge of future bonds to be sold by your clients – the bond issuers? What knowledge do you have?**

Sometimes I do. In the process of gathering material evidence during the rating process you become privy to a lot of information. I get to know how assets are performing relative to projection, and I also sense upcoming securitisations.

**20. How would you describe your relationship with bond issuers?**

It is a good working relationship. Even when there is an argument I always insist that we reach a conclusion that protects the investors before ourselves, this usually helps our relationship. If a security is not market worthy I will know from the application form already. If it is market worthy but needs to be enhanced that we need technical as well as interpersonal skills on all sides to make a rating that represents real value to the investors. I would say interpersonal skills make the difference in my rating relationships and we need more people with interpersonal skills in financial services as a whole. It is not what you say but how you say it that can be the barrier to reaching a decision.

**21. What is your impression on notching?**

A notch is an upgrade or downgrade along our ratings table based on timely information. We do stop monitoring our ratings after publishing them. You know that in securitisation the period could be for up to 10 years or more so when we notice positive or negative changes we make positive or negative notches to the previous rating. In 10 years you have many ups

and downs so the rating is likely to change from time to time. I agree that notching could also mean the difference in ratings between ourselves and other CRAs but it is common practice, everybody gets notched by everybody. We only try to provide statistical explanation when we notch our counterparts and I wish others will do the same.

**22. What is your impression on tying?**

I have no opinion; it does not happen at Moody's so I cannot comment.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

I do not think that ratings failed by themselves, I think that the securitisation practice failed in the crisis and this affected the performance of ratings. My view is that with better leveraging, due diligence and asset quality ratings will hold up. Demand for ratings have since picked up except in some products like credit default swaps and the synthetic instruments. The reason is that synthetic instruments were responsible for more losses during the crisis than any other product.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

Only a small percentage of people participate in the securities market. Some are gifted investors and other are gifted managers who manage the investments of other people. These people know the efficiency of the market, they are specialists. For them this is a mature sector, but outsiders may think that they do not know what they are doing. I am not saying that everybody is a specialist in the market, but they are a fair few people with their eyes on the ball who deserve credit for their role in providing credit to the public through securitisation. I think we need more people to understand how it works and they will have a different view.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

I have seen many sloppy deals from unqualified issuers and we do not get very far with them, we pull the plug early. That is how we can discipline them here, we tell them it is not rateable full stop. If they do not know what they want they cannot make interest and principal payments to their investors. On the other hand, there are many qualified specialists like I already said, and these one have the right information and incentives to be here and to maintain market discipline.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

Too much is relative. There are several improvements to the legal framework in Europe and Moody's always provides support when asked. These things go in cycles, the industry and the regulators both hit a bump, we all just need to learn quickly and avoid the same bumps next time.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

We have notching and CRAs have prospered all this while but tying could get you in prison for antitrust. When I say CRAs have prospered I am not speaking about Moody's, S&P and Fitch alone, I include DBRS, Kroll Bond Rating, Egan-Jones Ratings and the many other sizeable players around the world that add value to financial services in both small and substantial niches. I think we all have to come off the idea that prosperity in this industry means having the same global presence as Moody's and S&P...it is absurd. The smaller agencies have a place and are rewarded to the extent of their history and the scale of the services they provide.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

It is not desirable because viable CRAs go through a learning curve. Any government support sounds like giving aid to me, those CRAs will miss the essence of standing alone and growing from the inside.

## **Respondent B**

### **Transcript for CRAs**

#### **1. Background and experience**

I have an MBA from the University of Chicago. I finished my programme in 1985, and I did not have a finance background prior to going to business school. But after business school I worked in finance continuously. I started in corporate lending and then I moved to exchange risk, market risk and operational risk inside exchanges. And then in 1995 I wore two hats, one was analysing project finance deals and the other hat analysing structured finance deals. I worked out at Hong Kong for Moody's but subsequently I moved back to New York in my last year.

#### **2. Education**

MBA University of Chicago

#### **3. Job Title**

Principal Partner, R&R consulting.

#### **4. Projects Involved In**

Project finance and structured finance.

#### **5. Securities Dealt With**

I was based in Hong Kong so I rated everything. I was in charge of the non-Japan portfolio so any type of structured deal that came across my desk was my responsibility. When I moved back to New York in my last year at Moody's I rated primary ABS and ABCP. Asset backed commercial papers at the time were changing because it was the very beginning of a transformation from a static old fashioned analysis to an up to date analysis that was more dynamic with all kinds of structured features. I left Moody's at the end of 1999 and formed the company that you see today.

#### **6. Impression on Competition in CRA Industry**

A year and a half ago, I would have told you that there was no competition. But that has changed a little bit in terms of the number of institutions. So as you know, the SEC made a concerted effort in 2008 to open the playing field to new competitors, and in 2009 they basically closed the doors. So there were a few parties that slipped in between 2008 and 2009, and none of those players have really prospered or flourished. Egan Jones has not really developed a commercial business. They have a commercial business but as a rating agency they do not have much influence. Another rating Agency LACE Financial that was seemingly a kind of corrupt crony to make deals for a Washington regulatory insider caused the SEC a great deal of embarrassment. And so, when Jules Kroll wanted to start his rating agency in 2010, they struck a deal. Jules Kroll did not have any qualification to become a rating agency, but he bought LACE for \$5 million and that sort of absorbed the SEC of its dilemma and it gave Jules what he wanted. His rating agency benefitted tremendously when S&P made some fatal errors that become public in the CMBS market, so he started to grow in the CMBS space. Most recently, Morningstar, which had also acquired a license but hadn't done much with it, Morningstar had kicked off a little bit of steam, and it is trying very hard to become a player in some of the exotic asset spaces and I think they will be successful. And

then as we all know, Carlyle has purchased DBRS, so DBRS was not really much of a factor although they were around for a long time, and it remains to be seen what Carlyle will do with them. So I would say that institutionally I can no longer say there is no competition. I can say there is competition at the margin. But, I would also say that in terms of new methods, there is no competition because the rating agencies that have started in the last 5 years are basically recycling the old rating agencies' people and they do not have distinctively different methods.

**7. Is the CRA industry dominated by a few players?**

I think it is a duopoly. As a former rating agency person, I believe that rating agencies may attract business based on personalities and relationships. But they actually keep business based on their methodologies and their ideas. If they have good and strong ideas then they have staying power in the market. Individuals cannot give a rating agency the kind of staying power that good rating ideas can, and in that sense, we all saw the credit crisis but we have seen no real methodology to address the causes of the credit crisis. My little firm has specific methodologies that address that problem. We saw the problem before it arose, and we are not able to get a role, you could say that it is a little bit sour grape, but on the other hand I think it is indicative of the power of the market and of the SEC for new ideas. So in that situation inevitably, old players are the one who would continue to hold on to the market share and the mind of the market, and those players are Moody's and S&P. I do not think that Fitch has enough foothold in the market to make it an oligopoly. I think on the valid sense of ideas, it is a different game altogether and that game is about the lawsuits against Moody's and S&P by the Department of Justice, and S&P very recently settled and Moody's may be under the same kind of situation, and so it is quite possible that the actions by the Department of Justice will change the duopoly, but it is not going to happen in the market itself.

**8. Would you like to see new CRAs in the market?**

Yes, we would all like to.

**9. How would you attract issuers to get their bonds rated by you?**

I didn't. Demand always outstripped supply. I was based in Asia for 4 out of my 5 years at Moody's. Ok, it is not quite true that I didn't attract issuers, but I didn't need to do anything to attract issuers. Here is what happened. The market hated Moody's at the time, they hated Moody's because they felt that Moody's was bossy, that they were arrogant, it was almost a personality thing, and when I joined Moody's in Asia I realised I realised that Moody's had a double standard, that they said one thing to the US market and they did what they said. But in the Asian market they did not do what they said, they were more punitive. And so the first thing I that I did was to have conversations internally with Moody's and say, these are double standards, you say you do one thing while this is what we should be doing. And at the same time I did a lot of speaking, and because I had lived in Asia for a long time and I speak Chinese, so immediately I became identified as a friendly person at Moody's, and so I have to tell you that the business just came. I didn't do anything except for being more honest really, and less hypocritical. There were situations where I often turned people away because the bankers were not very experienced and they would come in and say 'I have got great assets,

what's the deal, how should I structure my deal'. And I would say that is not my job, you go back figure it out and come back.

**10. Would you accept specific instructions to rate only selected bonds within a pool of securities, or would you exercise discretion and rate the whole pool?**

Regardless of whether I am speaking from my time at Moody's or now, the answer is that I would exercise discretion to rate them all. You simply cannot analyse the payment certainty of a bond backed by bonds you do not know about, you cannot.

**11. How would you rate secured and unsecured bonds within the same pool of securities?**

First of all, when I was at Moody's, the answer is that I would give it to the focus group and they would do a shadow rating and that is the end of the story. If you are asking me myself it is kind of a complicated answer, I am not sure you want the answer, but it has to do with the way that securitisation actually works. That is not a conversation you really want to have but I would have a method, and the method would involve looking at 5 dimensions of performance, asset quality, leverage, management, liquidity, and then I would look at something that I do in securitisation which is the cash cycle, and I would make an assessment of the performance of the receivables of the company, and I would compare it to its peer group, because you can develop per comparisons, that is what the analysts do. I would compare it to its peer and on that basis I would get a risk that is better than, worse than or comparable to its peers. If the bonds are secured, then it gets much closer to a structured analysis doesn't it? Because now you have two forces of repayment, one is the quality of balance sheet, and the other is the payment certainty of that asset that has been secured. So in a standard analysis, a secured situation usually involves notching, you know, one or two notches above the corporate rating and I have to bear in mind that if it is a corporate rating then you have to give something like that but if it is a structured rating then the investors have immediate access to the assets in a bankruptcy situation so the ratings would be quite different.

**12. How would you rate senior and subordinate tranches within the same pool of securities?**

This is a very crucial question. When you interviewed Moody's people, I do not know if they ever told you this, but when I worked at Moody's in the 1990s, we had a numerical rating scale. So we all had real office and we all had a corkboard on our wall. We all had a piece of paper on our corkboard and on the piece of paper was a 6-point rating scale, and that 6-point rating scale told us that when we analyse the security backed by a pool of collateral, we use a Monte Carlo simulation, and we compare payment promise to the real life return through a Monte Carlo simulation, and the difference between the two on average is a number that we take and look up on the piece of paper on our corkboard and that is how we know what the rating is. What I would tell you is that I published a paper with Brookings through a Brookings economist, a very senior guy. It is all about this. So we use that, we all use that, and frankly I believe that it is one key reason why the market worked. And not only that, but I have drawn some conclusions thinking about it more and more that if you believe that triple A has a numerical meaning, and the meaning of triple A is obviously within a range but it has a midpoint, then effectively what you are doing as a rating agency is that you are providing a set

of conclusion. It is like foreign exchange, you are providing conversion rates to corporations, and those conversion rates allow the corporations to exchange their collateral for cash. So your role then becomes that of a kind of a simple bank for corporations and change to a point. It is like the changing foreign exchange rates; you will inevitably make money or lose money. You see what I am saying? And so up to the crisis, really the competition was about how cheap is my exchange rate, how much cash can I get in exchange for my collateral, that's really what they were competing against each other on.

**13. When rating a pool of securities, do you factor into your decision making the ratings for underlying assets provided by counterpart rating agencies?**

This is a very political question, as an R&R person, I would rerate it. When I worked at Moody's, we would rerate it. Then there was some pressure from the market, this was after I left, to use another agency's rating, and that is when the whole set of conventions, around notching arose, which I think is bullshit. You observed that our method was to use a numerical method and then map that numerical outcome to a rating, but in fact all structured deals have to first produce a number because you cannot do engineering without numbers. So in fact, all rating systems, informally or formally follow the same process, which is going from a number to a letter grade. And what that means at a high level of extraction is that all the rating agencies were putting a price on the collateral, but the law of one price is such that the collateral has an intrinsic value that is what it is. So, if you have three ratings with three different prices, only one of them at most can be right, and most likely all of them are wrong. But one of them will be closest to intrinsic value. And that I think is why you have to try to rerate because your goal is to understand the intrinsic value of the collateral that is being repackaged. If Fitch has a rating, and I notch it down, then basically it is like a foreign exchange situation, it is like Germany turning to France and saying you know, your economy is not worth what mine is so we are turning to Greece. Basically it is like that, it is very similar to the situation in the EU right now. So you basically create a layer of exchange rates, conversion rates that have actually nothing to do with the intrinsic value of the securities being rated.

If CRAs all use the same methodology they should all get the same result but they do not use the same methodologies. Fundamentally, when you are rating structured securities, you are trying to quantify the uncertainty of repayment. And there are two sides to this coin, the par value of securities minus the expected uncertainties or the expected impairments gives you its intrinsic value. So to get the right answer you need to use techniques that enable you to narrow the band of uncertainty in forecasting. The first thing that you absolutely need to pay attention to is whether you are introducing uncertainty with your own model. For example, if the capital structure of an ABS has tranches and it has triggers and it has a dynamic reserve fund, is your model capturing all the dynamics? Because if it is not then your model is not giving you a very good output of what the performance of your collateral is going to be. And so that sort of addresses the question of the timing of cash flow receipts, and then the question of variance in cash flows. For me it is pretty obvious that Monte Carlo simulation is

better than a series of scenarios. Why? Because with the Monte Carlo simulation I am making an exclusive assumption about the risk distribution. My assumption may be wrong, but at least it is transparent. Anybody can make the assumption, and use the same model and get the same answer. Then we can all disagree but at least we know what we are doing. Then a series of stress scenarios, if you are using stresses, then that is all very good, but what has it got to do with reality and probability. Maybe nothing, maybe your triple A stress for this deal represents 26 standard deviation and a triple A stress for another deal represents a 2 standard deviation event, then your triple A is not consistent. So the most important part of rating securities to make sure that your internal modelling works is to make sure that it is consistent with the deal, that it is consistent with the data that is available, and that it is consistent with itself, so that you are looking at the same frame of reference, the same terms of reference for every deal that you do. And that way to achieve consistency ultimately is to use the same rating scale because at the end of the day you need to map these numbers to a rating, and that is a rating scale. So now, if you are using a different rating scale for every deal or a different rating scale for every asset class, or a different rating scale for every type of ABCP/ABS/RMBS/CDOs, which is what they did, the CDOs rating scale was much worse rigorous than the ABS rating scale. Or, if you are using different rating scales between rating agencies, well then you have chaos, and we had chaos. It is very difficult to go from a situation of chaos and find the truth, but it is very easy to start at a point where you appoint methods and numbers to a rating. That is start at a rating scale, and then make comparisons, and that is very simple.

I agree that things are not uniform across the rating agencies. In fact, I think it is fine for rating scales for non-structured finance to be owned by the rating agencies and so on. But, I actually do not believe that rating agencies should own the right to numerical rating scales in structured finance. I think that should be promulgated by the OECD or by governmental agencies, they are not deciding what deals get done, but they are deciding what the meaning of triple A, double A, single A and so on is because these definitions determine the leverage in the system and the velocity of money, and these concerns are not rating agency concerns, they are central bank concerns. You can see why nobody really likes our ideas because they are very threatening and in particular when you have arbitrageable rating scales, then you are creating an opportunity for certain parties in the market to make money, to simply make money by the rating scale. And that is wrong, I think, but obviously the biggest decision makers do not agree with me.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

I will have two answers for when I was at Moody's and now. When worked at Moody's, issuers would come to me, or I would say the bankers representing the seller would come to me and if they already understood what we wanted, then they would you that I needed a term sheet, and I need static pool data on the collateral and that would be the starting point. And then what I would essentially do is to probably conduct an operational review and I would ask



them questions that would tell me or not whether I thought the static pool data that I was getting were truthful. I had a little more experience in that in Asia more than the average American analysts because in Asia many people did not know what static pools were. And so the first thing I would see would be portfolio data and then I would say you need to make these into static pool data and I would tell them how to do it. They would go back and do it, then I would also do it and then I would compare the results. At that point in time, we did operational reviews for free, and so I would go to the issuers' premises, I would interview the front office, I would interview the back office, I would talk to the collections people, I would talk to as many different people as I could. And I particularly liked to talk to the collections people because they were very honest. I would ask them questions and all they do all day long is to try to collect payments on the accounts so they mainly had no stake in telling you a lie so they would just tell me the truth, and I would get a very clear idea of whether the data we were getting was truthful or not. so I had a lot of tricks that I developed over time and it helps if you speak Chinese and you go and talk to a Chinese speaking team, they are going to tell you more in Chinese than they do in English too, so I would use all those things to try to come up with the best impression. I would do as many things as I could, I would play as many mind games as I could to try to get reasonable inputs, because obviously people have a vested interest on the other hand, of giving you inflated inputs. But once I had the input, the methodology was standard, I would run a cash flow analysis, then I would do a Monte Carlo analysis simulation, and then I would measure the outputs, just like what I described to you.

But what I do now is, usually the people who come to us are people who have smaller deals. Sometimes they are more exotic, and the bankers do not want to spend their time developing the term sheets and so on. And so, we do not qualify as a rating agency so nobody wants our primary market ratings, they may want our secondary market but they do not want our primary market. But smaller people may turn to us to help them get deals into the market. So we play a kind of consultant role, where we help to structure the deal. First we see whether it is feasible or not, some of these deals just do not work, and we tell people who come to us that this does not work. If it seems that it would work then often it is new type of deal, a new asset or something, and then we spend some time to figure out the economics of that asset and then we create a structure with them. It is a time consuming process but we do that and then at that point we set up a cash flow model, and the cash flow models that we build is actually from a tool we created to standardise all of the terminologies, it is almost like a drag and drop, so that you cannot make a mistake in the coding, and so it is a very fully articulated model, and then after that we do exactly what I mentioned before. We run a Monte Carlo simulation on the output and we use this 6-point scale that we share with everybody, everybody knows what our scale is, and we assign ratings. And then, at that point they take our analysis and they go to the rating agency and they basically ask the rating agency to do something with it. So the rating agency probably notches ours, we do not know exactly what they do, and then it goes to market. But the difference between what we do and what others do is usually not so much in the primary market because what we do in the primary market is very similar to what

we did at Moody's except that it is much more thorough. The difference is that we rerate deals, and it is very important to rerate structured finance deals because there is uncertainty, and because they are backed by pools, not by corporations. And because the money comes from the pools, not from unknown, uncertain future revenues from a company. Therefore, when the pool came down to zero, then the uncertainty of performance comes down to zero. This is not true of corporations, but it is true of structured deals so it is like an option, and like options, this expiration of uncertainty changes the value, because it changes the risk, and so we rerate the deals.

**15. Tell me about the exit rating clause in rating contracts?**

I have never heard of that because it is irrelevant to structured finance, at least the Moody's way.

**16. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers?**

When I was at Moody's I would say that 80% of my time was spent with the financial arranger, and 20% with investors, the government etc. explaining our methodology, that was Moody's. Today, because the ratings did not work we had a crisis, we had a massive crisis. Our business started out in 1999/2000 with a focus on the secondary market because we realised that ratings were static, they don't change, so credit quality changes but the ratings do not reflect that, so we developed a patented process for rerating deals, and we did not have very much business, nobody wanted that, but then we had a crisis, and after the crisis, a lot of investors who lost a lot of money turned to lawyers and the lawyers hired us to evaluate the damages. And so, ironically or sadly, we have mostly used our rating tools to quantify how corrupt the so-called real ratings were and the damages. For us a rating and an evaluation are the same thing, you subtract from par value your expected loss, or expected payments and what remains is the intrinsic value. So people do not usually want to know the rating they want to know the value in the secondary market. So I would say that until recently, 60% of our time was spent working with investors you would know, you have heard about them in the news but we cannot tell you who they are, but since 2006/7 we were involved with all of them and we are still involved. We are involved with assessing damages; we are involved in critiquing models that did not work, all that stuff. We also have a growing business in clients that want to do the analysis themselves. So we license our software system that we use to our clients. Very few people inside the U.S. want our system, but outside the U.S., there is a growing business. We have clients in Japan and in Hong Kong. I do not know about Europe maybe one day.

**17. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)?**

We do not solicit litigation work. On one occasion I had advertised to somebody else what I thought was good, to my lawyer clients. Because the lawyers are always looking for the next lawsuit, and I do not want that either. I do not want to be in litigation, I want to be a rating agency. But fate, so far, has not had that in line for me but I have all these lawyer clients and they say 'what is the next litigation' and I would say I do not know, and I do not care. So we

do not solicit, period, so the way that we get business is that we teach. And often, our students later become our clients. In the past we taught through NYU, Sylvain teaches in Beirut now and I teach in Hong Kong. In various places we teach executives, and at others we teach graduate students.

**18. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers?**

Yes, we do. And we do not see anything wrong with that. We think that the crux of good risk management and good asset management more importantly is using a fully articulated, transparent and internally consistent system. And that system should be able to address multiple issues, and so driving risk one way on one system and a different way in another system, that is wrong. But if you have a system that is very flexible, it allows you to use different parts of the system for different tasks.

But when I worked at Moody's, I just did ratings. We also did not have an internally consistent system, that did not exist Moody's. Moody's system had many flaws, it had a good idea behind it but the execution was flawed. So, if you were going to use that system to develop ancillary services it would be a mistake.

**19. Do you have knowledge of future bonds to be sold by your clients – the bond issuers? What knowledge do you have?**

As a matter of fact, I usually do, because I want to understand the total context of their financing. If you do a securitisation and you ring-fence the assets or put them in a tranche, the whole idea is to make the company's bankruptcy remote. So if the company goes into bankruptcy, it shouldn't affect the securitisation. But as a matter of fact, if the company is really pumping up the capital structure with a lot of leverage, I want to know that. So methodologically it shouldn't matter but in the total credit context it certainly does matter. At Moody's, in Hong Kong, doing the Asian deals, I was quite well aware of what types of capital market activities these issuers were engaged in, or what they were going to engage in. In the U.S. not so much.

**20. How would you describe your relationship with bond issuers?**

It has always been a strictly professional relationship during my time at Moody's and now. No compromise.

**21. What is your impression on notching?**

Notching implies that you are using a numeric scale, quite frankly. It is meaningless to notch on an alphanumeric scale. If you are notching on an alphanumeric scale, it is just a political negotiation, it has no numerical content because structured finance is numerical and intrinsically numerical. So, if you are going to notch you need to know what the deals are, everybody should be able to evaluate that the notched rating is consistent with value.

Notching is a very simple matter if I can compare your scale to my scale. I do not think that structured ratings are opinions, I do not think they are, not really. They are the output of a model. They still require human judgment in the use of models, there is stupid modelling and there is intelligent modelling, but they are primarily the artefact of an analytical technique, not

of the human mind, because most of the analysis is about assessing and reassessing risks, not in trying to make some sort of uncertainty.

I have no evidence of being notched for certain. I do not know what they do, I think they look at our analysis and they just take haircuts on our cash flow assumptions. Their assumption is that we are going to be too generous because we are hired by the clients, and in fact that is not true but whatever...we are not generous, we are more consistent than they are, but because these clients mean nothing to them so they just take a haircut.

I think it is ok to issue unsolicited ratings because, there are two reasons to object unsolicited ratings, and one is that ratings agencies are using unsolicited ratings as a way of blackmailing the issuer into using their ratings, and that was the belief of the department of Justice in the late 1990s. It was on that basis that Moody's stopped issuing unsolicited ratings. But, the other reason is that the banks hate unsolicited ratings, and they hate them because an unsolicited rating can destroy a line. So the banks have a lot of clout, a lot of power, and historically the reason why Moody's did unsolicited ratings was because the banks were fooling their clients. The reason you have credit rating agencies is because certain clients are not sophisticated enough to deal with the bank as peers, and so they need a sort of third party to provide objective information that they can compare to the banks. We know of a couple of cases where Moody's was using unsolicited ratings to bully their way into the market. But I know of many other cases where the banks were making untrue statements, the SEC disclosure simply was not enough. Those were the situations where Moody's thought it was their public duty and obligation to provide a rating which investors could ignore if they liked. Instead of saying get me into the deal or I would do a good job, they were saying 'look, to our understanding this is the credit quality'. Now, the crux is that if you are doing unsolicited structured rating you may not have as much data. And so that is how the rating agencies could bully their way into the deal, saying if you do not engage us then we would give you a rating and you would not like it because it is based on a limited data source. But, if you engage us, and you give us your data, we will give you a rating, that is wrong...that is totally wrong. But, I thought that what Moody's had done for most of the 20 years that they did unsolicited ratings was good because they absorbed the cost themselves and said they were a public utility basically. We do this for all deals, take it or leave it. And I think it is very important to note that it was the Bankers' Association and lobby group that went to the Department of Justice and told them that Moody's was blackmailing the market, and they did it because they were so pissed off because Moody's was pointing out that some deals were not that great. It is complicated but I definitely come out on the side of believing that unsolicited ratings are a good thing.

There were a couple of famous cases of Moody's bullying their way into the market using unsolicited ratings. One was in Mississippi; I cannot remember what the other one was. There

was an allegation in the structured finance group on a guy who is no longer at Moody's, that he was doing that.

**22. What is your impression on tying?**

Now at R&R consulting we do not have that kind of market clout, and I never engaged in tying when I worked for Moody's. First of all, I had the position to do it in Asia but I never did, nor was I asked. I never had the political power or the position in the U.S., but I mean tying is illegal between banks and issuers and I think that it is unethical. I think that you assign ratings to provide benchmarks. I was actually working at Moody's at the time when we issued a rating whether it was solicited or not, and that changed a little bit after the Department of Justice prosecuted Moody's. I believe in unsolicited ratings but there shouldn't be any tying, period. A rating is a rating. If you have conditions on it then do not do it.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

I have a very radical view on the role of rating agencies. My view is that rating agencies fill gaps that academic finance hasn't filled. Credit rating agencies fill an intellectual gap; in most other industries the asset involved is not money. The asset is something physical. Most people in the world would most probably know about the asset side of the balance sheet, the do things, they buy cars, they process things, they have cash, but most people do not understand finance. Most people do not understand the structure; they do not have a good intuition for credit at all. They may understand equity a little bit because they understand ownership, but they do not understand the things that they own as assets, they understand them as things that they use. So for most restaurants, services and goods, the market standard in those areas are much more tangible and readily enforced and it is easier to build a community around that. But, when it comes to finance, the community of people who are involved in finance are themselves competing with each other for profit. Market discipline is a beautiful concept but it was made up by a bunch of academics that have never been in finance, because if they had, they would understand that finance is a game and the goal is to extract the most profit at the least risk. So rating then becomes a target for the market to manipulate. So I actually think that the rating business is an anomaly, which started out at a point in time when it had a utility, but the reason it continued is because academic finance has totally ignored credit. There is no academic study of credit, and therefore the rating agencies continue to operate but the banks manipulate them. I think that the rating market could be like the other industries, but in order for that to happen we need to develop a broader community of people who are involved in governance, who speak the language of finance, and assets, and can make parties accountable.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

I have a view that is somewhat bias because it comes out of what we do, but I believe that the market will not mature until there is a viable secondary market. The secondary market for

ABS or CDOs has never developed. There is some trading, but it is not a liquid market. Why is that? There is a sort of liquid market for RMBS in the U.S. because we have Fannie & Freddie, but if we did not have Fannie & Freddie I do not think we would have trading in RMBS. So why is that? For the very simple reason that the pricing benchmark for structured security, but I think that the market knows that the pricing benchmark is only valid when the security goes the market, that the rating becomes stale after that point. And so if it is stale, no trader is going to make a market because the xxxxxx [crackly sound] asset is simply too wide. So there is not much trading. So it cannot be a market because there is no consensus on value in the after-market. Of all the ideas that my firm has put into the market over the 16 years, we are getting the most positive response right now for talking about tradable ABS. and we have put together some presentations and I have talked to the Hong Kong exchange and some other people, and I started a year ago too early. But what I am hearing now is that there is tremendous interest, a buzz in the market about making ABS tradable, and I think that it is coinciding with the fall of S&P. Yes, the fall of S&P, after S&P agreed to settle for \$1.37 billion, and I have heard that the same may be true for Moody's down the road so Moody's could also be in trouble. So I think that the market participants in the past never believed that rating agencies would lose their control of the market, I think that there is a growing feeling that this market has to become a private market solution and that the way to do that is to make it tradable. Nobody wanted to make it tradable before. If you are a bank participant and you command the OTC market and you make big spreads, you are never going to want to become a traded market. So I actually think that it is not a mature market. I think that the first 30 years were baby steps, and that the market that ultimately results will be significantly different.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

As a trainer in structured finance, I think there is plenty of information. People have access to data, people have access to methodology, but what they do not have is that they are not trained. It is like an English speaker getting off the ferry in France, if you do not speak French you are not going to get anything, but you cannot say that there is not enough information in the French language. The problem is that you do not speak French. So it is a universal problem of training and not information. Regulators are not trained, bankers are not trained, sometimes even rating agencies are not trained. Investors are not trained, they think they know, and ego tells them I have an MBA and this and that, I should know this but actually do not, but they do not know that they do not know.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

In a word, yes. I believe in market discipline, and I believe in self-governance. But it is all really based on access to good information and having people who are informed what I see in the United States is that the solution that came out of Dodd Frank are no better, in fact they

are worse. Why? Because now we have committees. But if we have these smart people to run these new committees, where were they before. It is the same people, so a new committee is not going to help, and rules made by people who do not understand how the market work, that is definitely not going to help. So, I do believe in market discipline, but I believe that laziness and overreliance on market discipline as a kind of excuse that is relying too much.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

I think that tying and notching produce not a barrier to entry, but they actually introduce constraints on how the market works. They change the economics. I do not believe that the market wants new players, unless they have something of value to offer. So in terms of a welcoming market, the market wants a rating agency that helps them do more deals. But that is the issuers' side, and probably the investors' side as well because they want protection. They also need to buy deals; otherwise investors wouldn't have bought all the shoddy deals that came out in the crisis but they did. Why? Because they had to, that is their job. Our strategy and my view on how to get market acceptance as a new rating agency is to have a better model fundamentally, to enable parties in the market to make judgments or discern risks and return more precisely. And it is not hard to do, because the models out there are not very good. But that is an answer for the market, the problem is not that, it is that in the U.S. in order for the market to accept you, you have to be designated by the SEC, otherwise you simply do not count.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

I have actually seen the opposite. I have seen governments intervene by stifling competition. When we applied for NRSRO designation in 2011, we met all the criteria and I believe were actually the only one who met all the criteria, except for one, which was that you need to have 10 letters from qualified institutional bodies and we had 9. It takes a long time to get 10, and that time we were generating about 2 or 3 a year and clients have the option to say no, and they will say no because they do not want the SEC to come back and do something to them. so we were the only people who applied that actually followed the rules. We had 9 out of 10, we were expecting to get a 10<sup>th</sup>, and they basically told us to withdraw our application, and we asked them why, and the main reason was because when you get a letter, the SEC proposes text for the letter, it is supposed to be suggestive text, but it is not suggestive text, they do not tell you this, but they want the real letter to say exactly what the text says. And we tweaked the text slightly to say that our clients used our credit ratings or our valuations and for us it is the same thing. Even for Moody's it is the same thing. Moody's do ratings and they say it an expected loss, so par value minus the expected loss gives you the intrinsic value. So they only allowed one of our letters as valid, and the other 8 they said were not valid because the people who wrote them were using our valuations, and they said that a valuation can never

be rating, which is absurd, it is mathematically absurd. So they said we advise you to withdraw your application, and then you can reapply and we will guide you step by step, and we knew then that they found our application very uncomfortable. They wanted to reject it but they did not dare reject it because if they did we would sue them, and if we sued them it would look very bad because we were known to be very independent, very honest, we became the go to people during the run up to the crisis to explain what was going on. We were the ones who declared in early 2004 that the CDO market was heading for disaster because it was very similar to what happened in the crisis in 1929. We did not make any friends but we had a long record of honesty and we had this rerating system, we showed them in our rating how close our ratings were to the truth but they were not interested in any of that. So we had to conclude that they really did not want any new competition, that they are there to protect the existing rating agencies. So I would love to see government actually encourage competition, but then unbiased, but my experience has been the opposite.



## Respondent C

### Transcript for CRAs

**1. Background and experience**

Former employee at S&P.

**2. Education**

BSc Finance

**3. Job Title**

Retired

**4. Projects Involved In**

Structured Ratings and Performance Modelling

**5. Securities Dealt With**

Gilts, RMBS, CDOs, CDS

**6. Impression on Competition in CRA Industry**

More competition is imminent and there is slowly but surely a change from the past owing to everything that has happened over the last half a decade or so, it is now diluted. The big agencies are now looking over their shoulders more than usual but I think it is good for them that this is happening. You can improve your practices and your strategy with competition better than you would be able to do without it. It is a pain for the guys at the top but for everybody in general it is exciting. Some issuers and underwriters like the variety and those who see S&P and Moody's as bullies can now go where they like.

**7. Is the CRA industry dominated by a few players?**

It is dominated by a few players. I was at the fore of this dominance at Standard and Poor's for a long time. In some respects, we were lucky to have been in the trade for as long as we have as an institution. You could not tell 40 years ago that ratings will command a huge part of the transaction costs in the modern securities market. Having said that, a lot of work is needed to stay lucky within the rules of the game and this is what S&P has done well especially in Europe where we fared better than even Moody's. To answer your question, S&P and Moody's dominate the industry in what I call the important markets.

**8. Would you like to see new CRAs in the market?**

Not during my time at S&P, I no longer have concerns on the number of players. I cannot be bothered now how many CRAs there are as long as they supply fair ratings, that is the bar. A great deal of competence and training goes into rating and it is not easy to assemble a team of analysts to turn over rating requests to schedule. They will need sound management to cope with requests, staffing and overheads from the start. In another business you can get away with learning at the beginning, but when you are providing an opinion for an institution that will be taking money out of the pockets of investors, the stakes are very high and things can come back to bite you.

**9. How would you attract issuers to get their bonds rated by you?**

Demand for ratings is far in excess of supply. We were too busy meeting rating deadlines that we did not have the time to do any selling. This is true for all periods by the way, before, during and after the market crash. In reality too, the rating department and the marketing

department are very separate places and we only speak to clients when a business lead introduces us.

**10. Do you often get requests to rate just one or a few tranches of debt instruments within a large pool of securities? (Rating Analyst)**

We do get these requests and they are accepted if the instruction is well-intentioned and if the slice of securities is targeted towards particular investors seeking the rating at the time of the request.

**11. Do you (as a rating analyst) rate just the tranches requested or do you go on to rate the whole pool of securities anyway?**

First of all, we would review the whole pool and analyse information from all sources involved with the project before studying the viability of the various portions. After this we conduct various operation assessments by running iterations with a cash flow model for the various portions separately, secured and unsecured.

**12. Why do you rate the whole pool?**

Pretty much the same reason just given, you run the cash flow model to determine how the tranches can absorb defaults at their various degrees, and their likelihood to repay investors.

**13. Do the supplementary tranches rate as high as the main tranches you were requested to rate?**

No, it would not work like that. Auxiliary tranches are your first loss pieces and they get compensated last if the asset's performance goes south and this is because they have no assets or fewer assets underlying them when compared to the primary and secondary tranches.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

The issuers make a request and we begin with a review of the financial and corporate information provided. The sort of review done would differ across types of investment like structured securities and government bonds. For structured securities for example, we would start with an assessment of the liquidity of the underlying assets and its legal authority to deal. We also examine the payment arrangement and the cash flow as expected. Our examination has to be a balance of a quantitative and a qualitative review. Therefore, we spend a lot of time going over the strength and weaknesses of the asset managers and other parties connected to the asset to be sure of the claims are as reported and not more. For the rest we make a decision and let issuer know what we think of their creditworthiness.

**15. Tell me about the exit rating clause in rating contracts?**

S&P was of the view that it shouldn't be easy for bondholders to swap rating agencies when their exposures amount. So we thought that if they had nothing to hide, and wanted early termination from us, then they would agree to be bound by a clause. Obviously the clause makes issuers uncomfortable because even with the best of goodwill they could not predict the future with absolute certainty but neither could we. Ironically, exit clauses make ratings attractive to shrewd investors. Only conspiracy theorists speculate that exit ratings are notched downwards, it is not the truth.

**16. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers?**

We provided just ratings, and a wide scope of ratings.

**17. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)?**

None initiated

**18. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers?**

None provided

**19. Do you have knowledge of future bonds to be sold by your clients – the bond issuers? What knowledge do you have?**

Sometimes I was privy to some information without meddling. In rating securities, you will always have privileged information during the call of duty. It is like buying a house; you deal with a whole lot of tradesmen and professionals giving and taking information along the way. For issuers to succeed over time they do the same thing, they share information nonstop. What you should be concerned about is not what information people have but how they use that information, they ought not to abuse it to the disadvantage of unsuspecting investors.

**20. How would you describe your relationship with bond issuers?**

I never had contact with them during the rating process. That was the job of the marketing team but in social circles I knew them and they knew me and there was no friction.

**21. What is your impression on notching?**

It is an institutional practice, maybe even an industry-wide one. The aim of notching is to decide ratings according to structures' ability to absorb default. By structures I mean tranches. This was definitely S&P's view on the matter. Our practice was to notch secured debt upwards and notch unsecured debt downwards. It had nothing to do with competing.

**22. What is your impression on tying?**

There was an S&P policy against tying if I recall, it was a part of a long list of 'do nots' in the company's conflict of interest management policy. We all knew that we could not set any conditions for issuing ratings or other products because it would seem that our processes and standards were compromised. The S&P term for it was 'rating dependency'.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

The problem is that when ratings fail the news goes viral, the whole world knows especially in the more high profile cases. But ratings generally perform well and are a candid opinion of a debtor's position. The news outlets will focus more on the investment grades and triple As but those are not all the ratings published, the rating scale is a spectrum and we did issue ratings across the extremes of the spectrum from triple A, double B all the way down to D for default. For me the performance of ratings cannot be judge in one period, in one location or in one crisis but over time. From that point of view ratings succeed over 95% of the time and that's not so bad and I know that Standard and Poor's would like to be even better than 95%. So, I don't believe that ratings have failed in the grand scheme of things and this is why they

remain popular with investors and regulators alike. It is not an easy job for investors to take up themselves and they don't have to pay for it. Also rating information is widely shared so that everyone has a benefit from it.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

At the moment I think structured finance is still growing and has passed the birth stage. I think this is the case because issuers and investors are selling and buying more securities, in spite of the blip a few years ago. So, both revenue and sales are on the up and I cannot see the peak of things any time soon. As for market discipline, I take it that you mean the efficiency of price setting. In my view that was one of the problems in the market crash, there were too many arbitrages and too many synthetic vehicles than actual vehicles. What you notice now is a reduction in synthetic CDOs for example, and also some discipline imposed by regulators. Some hard lessons have been learnt I can tell you that, and the field of play changed for the better and we are now seeing better practices. The effect is that structured finance is no longer the monster that it used to be and more people understand the mechanics of it.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

Disclosure is getting better and better. I am an investor myself and looking just a few years back to the kind of information provided to individual investors like myself and what is provided now, the detailing has greatly improved. Issuers would like to entice investors who have choices to invest in many other places, so there is no better advertisement than rich information on the books, the asset value and the cash flow. Getting a rating is one hurdle for issuers, you still need to work with the banks to secure buyers and sometimes issuers cannot sell all their issues – this is a situation they try to avoid as best as possible.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

No not at all, it is a free market. I think that once the government puts measures in place to ensure that investors are protected from fraud then it has done its part. You do not want government doing more than that in any zone; they screw it up every time because they are politicians and not technicians.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

I do not know if they would, it is hard to guess these things.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

No, evolution not revolution is how I see things. The major CRAs are already feeling the heat around Europe and in South America from smaller CRAs and that is what you want. The government will inadvertently turn the heat off by intervening. Some of these smaller countries are seeing their capital markets develop at rapid pace, and some smart analysts, no less alumni from S&P and the others have sensed an opportunity there. I think of provinces in China and places in Brazil, what a great place to retire with a boutique agency. The

government cannot facilitate this kind of expansion as they will attract too many of the wrong kind of people with their coupons. I know that ESMA has an agenda to increase the number of CRAs and on paper some of the new CRAs look great until you visit their websites or their offices. Your gut feeling tells you that they lack many things including basic processes and independence. It will not be long until some of them are found out.

## Respondent D

### Transcript for CRAs

#### 1. Background and experience

I attended university in the United States and got a master's degree from Johns Hopkins University based in Washington D.C. When I got my masters it was a boom time for international banking so I was recruited to go into the credit training programme for lending officers by the Chase Manhattan Bank which is now part of JP Morgan. I went through an intensive training similar to the CFA for a year, and from there I was posted into the Latin American division because I grew up in Brazil as a child and was fluent in Portuguese. So I was originally in New York and then I was sent to Brazil for 5 years where I did plenty of different things – I was a lending officer, I did credit training, I help restructure and reform the currency debt of the country, etcetera. After five years in Brazil, I moved back to New York and I was working in counter party risk management where I was involved in managing Chase Manhattan's credit exposure to other banks, and that was based in New York. So the banks were primarily US banks. So after being with the Chase Bank for 14 years, I woke up one day and said, you know, I am not really sure if I want to be here for the rest of my life. I was thinking of the various departments but could not really figure out what I wanted to do. But sometimes, Adah, my life takes funny twists at the most unexpected times. I am an analytical person, I like to be able to plan but sometimes things just happen in my life. When I worked at Chase, we used the rating agency research, at that time the big ones were Moody's and S&P. as part as our counterparty risk management at the bank, we used the Moody's and S&P research to supplement our own internal research. Chase was a big client of Moody's so they invited my team and me to go to their office. We were a few blocks away in lower Manhattan, and we were invited to do a round table discussion on banks. A few weeks later, I got a phone call from a head hunter, who said that there was someone who wanted to talk to me about a job, and I was, you know, scratching my head trying to figure out who it was, and it turned out it was the head of US banks research at Moody's, a fellow by the name of Chris Mahoney who at the time was the MD for the US banking team at Moody's. so we set up an interview and I walked out saying, you know what, I know what I want to do next. So the long and short of it is that at the time that I was speaking to then which was early 1993 before when you were born, or when you were in diapers I guess, I joined them and it was an interesting time because they were just starting to really grow their international ratings business so they wanted me to do something interesting, where 50% of my portfolio was going to be US banks, and the other 50% was to grow the Latin American banks' rating business. And so I started there in May of 1993. I was originally based in New York as I said, one year covering the US and Latin American banks, and then in a funny twist of fate, my spouse had the opportunity to move out to Hong Kong as an Expatriate with a bank, and me with my international background I thought well, by that time we had two children, they were very young, it would be a good experience for them to see something other than the middle class neighbourhood of New York, so let's go off to Hong Kong and I had never been to Asia before, but got off the airplane in Hong Kong and I could just feel the energy of the place. It

was just like, wow, this is an amazing place. So I went back to Moody's and said hey guys, I have got this opportunity to move to Hong Kong, it turned out that Moody's was just in the process of opening its office in Hong Kong and they had not planned to put a bank analyst there but they agreed to send me out there, so I became the first Asian bank analyst sent out there in the summer of 1994. As I said, my portfolio was to grow the business; it included everything in Asia with the exception of Japan. And I went through the Asian banking crisis in Hong Kong. I was recruited then by Merrill Lynch to work in the Fixed Income research desk in Hong Kong, covering the Asian banks. I had got to know a lot of the Merrill team because they had a ratings advisory team which interfaced with rating agencies on behalf of bond issuers to help prep them. Anyway I joined Merrill Lynch in Hong Kong and after almost 3 years I was transferred to Merrill in London where I did the same kind of work, and then in early 2002, Merrill was going through some unhappy times so I re-joined Moody's in London. First on the European insurance team and then in the banking team. So I spent a total of 10 years at Moody's at two different times, and I worked for them in New York, Hong Kong and in London, and always in the financial institutions team. In the summer of 2007, it was an unhappy time at Moody's, I was also seeing a lot of things in the banking sector that had me convinced that there was going to be another banking crisis. I never in my worst nightmare expected anything as bad as it was in 2008, but in the summer of 2007 I decided I was going to bail. And it was another of those kinds of situations where one night at a dinner party I met someone who was on the board of directors of a major microfinance network, and they were looking for some with strong banking, risk and analytical skills to help transition their NGO microfinance type organisation into a regulated bank. The reason they wanted to do that is that in most countries, if you want to be a lender and just make loans, you don't necessarily have to be regulated. But the minute you are taking deposits and savings from the public the game changes completely. So that was the situation that Opportunity International was in 2007 when I started talking to them. So they asked me if I would be interested in being the head of risk management for the network. They had approximately 40 microfinance bank NGOs in approximately 27 odd countries, and I thought, wow, this is an ideal next job. So I joined them in 2008 and that was when I moved from London to Canada. I was with Opportunity International until almost 2 years ago when they downsized because they had some funding issues. So I went out on my own as a consultant and I have been doing work for rating agencies, I do a lot of work in risk management, board training in corporate governance, I do risk assessments and risk reviews, and usually just drawing on my skills in various areas. So that is where I am, and as I said I have never been able to project how my path took me, but I have not been to Nigeria, I have been to probably 10 countries in Africa, I am going to Senegal actually in January, I was in Zambia and Cairo a few weeks ago but Nigeria has never been a destination. Sorry if it is longwinded but my path has been a little bit unusual, but you can see where the rating agency stuff fits in. I am actually doing a workshop presentation next week in Paris and Zurich next week on explaining the differences between the global rating agencies and the smaller microfinance rating agencies. There are a few niche players who you may have heard of who do exclusively microfinance and a lot of people

do not understand so I am really giving them a very complete tutorial on just credit ratings and bank ratings. So that is me, sorry if it is longwinded.

**2. Education**

BA Wellesley College, MA Johns Hopkins

**3. Job Title**

Former Senior Vice-President at Moody's, now Managing Partner at Exton & Partners Risk, Governance and Analytics LLP.

**4. Projects Involved In**

Portfolio Management and Credit Analysis

**5. Securities Dealt With**

You name it, short term debt, long term debt, bonds, subordinated, preference shares, you know anything that is in the capital structure of a bank I have done. I have also participated in rating securities for securitisations, so yes, in terms of structure my industries have been financial institutions and then sovereigns, countries as well because when you work as an international bank analyst you of course work very closely with the sovereign risk team.

**Impression on Competition in CRA Industry**

On paper there are a lot of players and you could say that there is competition. I myself am quite sceptical because I think the market shares of all the various players in Europe and some new CRAs in the US as well are quite small. I think that the smaller CRAs are actually having a tough time and compete for a relatively small piece of a pie. So I personally, and this is an entirely personal opinion, am not sure how many of them are going to be around or if some of them are going to find the wisdom to merge because I do not see how they could all survive. The other thing that I think is a huge challenge for them is that the traders are used to using certain rating agencies, Moody's S&P and Fitch, and they were looking for the least resistance, I mean as long as the person who was buying the security on it, they were not going to worry about some of the smaller rating agencies. So getting the people with the deep pockets who buy a lot of these rating services is, I think, going to be a challenge. I don't know how it is, if things have changes since I left the industry, but I am sceptical.

**6. Is the CRA industry dominated by a few players?**

Yes, I would say there is small number of players who dominate the industry. This is so for a couple of reasons, first of all they had first mover advantage and secondly they took advantage of the opening up of the capital markets, they just got a head start and I think that the smaller players that were established in the 1990s in Asia for example were very much focused on a single domestic market and did not really have aspirations to expand. For smaller CRAs to grow internationally it is going to require some very significant investment and I am not sure if the return on that is clear.

**7. Would you say it is a monopoly, duopoly or an oligopoly?**

I would say it is an oligopoly of the big three.

**8. Would you like to see new CRAs in the market?**

I think we should get some consolidation, or some kind of partnerships working. I know there is a rating agency called Arc Ratings which has been trying to create a global network of



rating agencies drawing on some regional ones. I am not sure how that is going to work but there is something like that. Like I said, unless someone has a huge amount of money, I do not see how they can fund the investment to try to make a significant inroad with the big three.

**9. How would you attract issuers to get their bonds rated by you?**

At that time, it was basically that they did not have ratings and if they wanted to a product in the market then they needed to have the ratings so it was not the kind of thing where there was a whole lot of selling to do to be honest with you. There was more demand than supply.

**10. Would you accept specific instructions to rate only selected bonds within a pool of securities, or would you exercise discretion and rate the whole pool?**

This applies more to structured finance.

**11. How would you rate secured and unsecured bonds within the same pool of securities?**

Same as 11

**12. How would you rate senior and subordinate tranches within the same pool of securities?**

Same as 11

**13. When rating a pool of securities, do you factor into your decision making the ratings for underlying assets provided by counterpart rating agencies?**

Same as 11

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

Your understanding of the rating process is generally right, the only thing is that after the rating is determined a draft press release is sent to the issuer, they are allowed to review it for accuracy, and if there is anything, like a misunderstanding in terms of the facts given, they are allowed to make comments. You do not just put out a press release without allowing the issuer view the draft but even at that sometimes you have to agree to disagree.

**15. Tell me about the exit rating clause in rating contracts?**

As an analyst at Moody's I was not involved in the discussions with issuers regarding their contracts and the associated fees and therefore cannot answer the question.

**16. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers?**

There were products and services in the consultancy side of the business that I did not get involved with.

**17. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)?**

Same as 16

**18. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers?**

I only did ratings and that was pretty clear. That was always in the code of discipline and very firmly managed as we had rigid internal compliance procedures put in place to avoid conflicts of interests.

**19. Do you have knowledge of future bonds to be sold by your clients – the bond issuers?**

**What knowledge do you have?**

It would be fairly unusual to discuss this with bond issuers during the rating process.

Sometimes they might discuss things as part of their capital raising and debt issuance, only in these situations of capital planning.

**20. How would you describe your relationship with bond issuers?**

In my case it was a repeated relationship because I worked with frequent issuers of debt. It might be different in structured finance but for banks it would always be a relationship building business.

**21. What is your impression on notching?**

I am sceptical of that because ultimately the issuers have to pay for ratings so I do not see why they would pay for lower ratings. I am not sure that in point of fact that is the way that things work. This is my impression but I accept that there may be others with a different view of how it works. During my time in Asia we issued some unsolicited ratings that generated a lot of negative press. So the unsolicited ratings stopped and one of the compromises they came to was that if a rating was unsolicited, it was highlighted in the press release. Initially it was supposed to be transparent in the press release whether it was solicited or unsolicited, but that perhaps has changed somewhere along the line, and now if I am not mistaken all of the rating agencies will indicate in the press release and will be clear if it is unsolicited. The motivation for making unsolicited ratings was that the rating agency was looking out for the interest of the investors rather than the issuers and so there could be a situation where the investors wanted certain institutions rated, that was the motivation. I think it was not issuer friendly but it was investor friendly. The number of institutions who returned to purchase solicited ratings after receiving unsolicited ratings was fairly high when I was in Asia. I would say probably 90%. However, they didn't always receive ratings higher than their unsolicited ratings, absolutely not. It depended, there was no guarantee to receive higher ratings even after further information was provided. And also, they could get higher ratings for lots of different reasons, maybe they got restructured, maybe the economy had improved. I do not think you can isolate the provision of more information for higher ratings. Higher ratings sometimes happened but with the presentation of balanced picture because there were a variety of reasons considered.

**22. What is your impression on tying?**

This for me was not something that I experienced as an analyst. There may be some negative press out there, maybe even some negative propaganda different from what I observed. I am not convinced that tying is a widespread problem; I am not saying that it is not a problem, I am just saying that I do not think that it was common. However, there could be tying practices but I am not sure it would be explicit. It gets to be the kind of thing where the rating agency contact got to know the issuers well and hopefully had a decent relationship with them, so you could see where over time there was just an assumption that they were going to continue working with them if things ran smoothly. It is like any business relationship, so it was not explicit as in rating products with an expectation for issuers to keep sending business the

CRA's way, but you know what it is like if you've got a good business relationship with someone and you know they are reliable, then you might keep working with them.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

I think it is because in the practical terms the modern capital markets today are predicated on having ratings so it was one of those necessary evils. I have not gone back to compare the market share of the leading credit rating agencies but it would be interesting to see over a 10-year horizon if you can measure market share. I think the SEC in the US does publish some data on market share but I do not know if it covers the world or if it is just the US market. But it is possible that there was a decline in the immediate aftermath of all the scandals in the newspapers but as I said, I think that here we are six years later and I think the market just kind of grit their teeth and moved on and tried to put pressure on the powers that be to try to address certain practices of the rating agencies but it meant that the big three stayed entrenched in terms of their markets. The problems in the rating industry before the crisis were more in the structured finance team than in the banking team. The structured finance team drank the cool-aid of the rating models, all the triple As were basically generated by models that they played with, and anybody who questioned them were basically silenced and I think that was the problem. And I think one of the reasons they did not want people questioning the validity of the models is because it was generating so much money for them. If you look at Moody's revenue composition in 2007-08, some remarkable amount, something like more than three quarters was coming from structured finance. It was such a cash cow for them so that is my opinion.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

I think that the market is still growing even though it is taking a long time.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

They do. Financiers or investors can decide to hold back their cash.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

Possibly, but there is more regulation now globally. Governments are having more of a say than they used to.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

Potentially and it would be to protect the revenue stream. There is possibly a distinction between protecting revenue streams and being anti-trust.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

Yes, but it would be interesting to see in five years from now how many of the new players in Europe are still around because I think the product itself is too narrow, and they try to create a niche for themselves but to be honest with you I am not sure that niche is really a valid one. It

is not viable, if I was running one of those niche CRAs I would be looking to merge with somebody and take it from there. This is not a criticism, I find that the quality of the analysis is generally good in most of the new CRAs, it is just that the market is small and I think it is getting smaller. I just think that the business model itself is flawed.

## **Respondent E**

### **Transcript for CRAs**

#### **1. Background and experience**

Director of Financial Services Ratings, S&P, 1996 – 2003

Global Head of Analytics & Innovation, S&P, 2003 – 2010

I am a fellow of the institute of actuaries, and I spent most of my career in insurance or risk management. I worked effectively on the rating side, on what was referred to as the bond rating business to provide commercial solutions to institutions. I tend to get involved in structured transactions on the rating side and also on the bond rating side in terms of finding solutions for them.

#### **2. Education**

BSc. Mathematics

FIA, Actuarial

#### **3. Job Title**

Head of the Analytical Cooperative

#### **4. Projects Involved In**

Undisclosed

#### **5. Securities Dealt With**

Undisclosed

#### **6. Impression on Competition in CRA Industry**

I think it seems to be increasing. Traditionally S&P, Moody's and Fitch have dominated but we are now seeing a lot of local rating agencies starting up in Australia, across Europe and so forth. Japanese rating agencies, Dagong from China expanding its activities, and also increasingly other institutions offering alternatives to ratings. My impression is that in North America in particular, there is still very much a dominance of the big three, but outside of America, I think there does seem to be a little bit more competition than there was 5 -10 years ago. I think the credit crisis of 2007/8 is responsible for this increase. I think the fact that the rating agencies have been pursued by the courts about some of their activities and some of their opinions. Some institutions have lost confidence in them, I think other players have seen opportunities to expand into that market place and the rating agencies themselves have had to comply with more legislation in terms of being more open in how they do things, how they arrive at opinions. They are more conscious of the fact that their opinions may be challenged. The sort of historical defence of just being similar to journalism and having an opinion but not really been an investment advice does not seem to be acceptable any more in the marketplace. So if an opinion leads to losses for someone who has used the ratings, that can lead to a legal challenge. So I think the agencies themselves are a bit more cautious and other players have started to move into the marketplace. I think that as a result of this the rating agencies have become more accountable. And also they have become more cautious in terms of how the revenue and the profitability can be...I mean I take my old company S&P for example, fairly recently I think they have been banned from doing certain types of

structured transactions for over a year because they did not comply with their own internally published guidelines for producing certain ratings. Whether they had reasons for doing that, they didn't comply and now they have been banned from participating in that part of the market I think for 12 months. So there seems to be a lot more scrutiny of them, and they do need to be a lot more accountable than they have been in the past.

**7. Is the CRA industry dominated by a few players?**

I think it is still dominated by a few players particularly in North America and less so out of there. I think Moody's, S&P and Fitch are certainly still the main players in an order that varies from country to country. It used to be Moody's and S&P, Fitch has grown over the past few decades. I think a lot of institutions when they want a rating, they tend to feel they have to have two ratings anyway so it might be any two out of the three.

**8. Would you like to see new CRAs in the market?**

Personally, probably not. I do think that the rating agencies won't necessarily survive in the distant future with their current business model. I think given the problems they have had, given the fact that they are now more liable and so forth, I think that this model may change. I think sort of increasing the number of rating agencies in the marketplace probably is not going to help. I think it is a natural downward spiral for the old rating agencies anyway. I think they are all not sustainable, I think that if they have another blow, another credit crisis, that could be the end for them. I think equally, certainly for financial institutions, the banks, insurers, fund managers etc., the entire thrust of legislation and regulation over the past decade has been to have their own internal opinions, and that also makes the rating agencies much less important in the future. I think there is a natural end coming to the rating agencies, I do not think that the sort of profits and revenues they have enjoyed in the past are sustainable into the future. In north America, even though they have been taking the requirement for ratings out of legislation. There are a lot of investors who still want to see the ratings. I had debates with a number of people about this in terms of saying well, would it not be better if the issuer just published its own opinion and explained how it arrived at it, and they said no no no, we want to see an S&P and a Moody's rating as well so I think it is going to take time but emm...I think Europe and Asia and more open to alternative opinion and are not as wedded to the rating agencies as north America. The investors want to see Moody's and S&P because of habit partly, and I think it is laziness partly as well. There is some fear that if there are 6 different opinions which are hugely divergent about a particular bond transaction or securitisation, which one do the investors choose? My own view is that if it explains how those divergent opinions came about, the fact that they are all divergent should be informative in itself. And chances are that still that for the majority of issues those 6 ratings are going to be close together. As an investor you really want to scrutinise their differences. So I think it is fear, I think it is lack of understanding of investors, habit, a little bit of laziness. And also it has been my experience that in America you have to show them something. You cannot describe something conceptually to people I think in America particularly, you cannot speak about the conceptual and the theoretical with the ease that you can outside of America. So you have to demonstrate something concrete to them, so probably one or two institutions to actually show

the investors how this can be done, how this can be a good thing is how their fears are justified.

**9. How would you attract issuers to get their bonds rated by you?**

Not personally. There tended to be, certainly on the rating side, a sort of firewall between those who market and sell the ratings so to speak, and those who actually carry out rating analysis. I suppose as an analyst, I would be involved in presentations in sort of a more generalised attempt to cultivate interest in ratings. But in terms of approaching individuals, investors, institutions for ratings, that is something the analysts do not really do. It is something you get the sales and marketing people involved in. they also try to keep the financial aspects like the rating fees very separate from the analysts that do the ratings. We called them the business development or the business cultivation team.

**10. Would you accept specific instructions to rate only selected bonds within a pool of securities, or would you exercise discretion and rate the whole pool?**

No, if there is a pool of assets there, and you are rating it, you would need to look pretty much at all of them, unless they were very minimal percentage of the whole pool, so you would need to know the pool profile and what assets are in there, and also to the extent to which that pool profile may change over time. If you were only to take a sample then the sample would have to be chosen randomly by me or my colleagues as analysts and you might aggregate some if there were sort of 10 commercial real estate properties in a particular territory, you might just get the aggregate profile and that sort of thing but you would not sort of ignore specific assets

**11. How would you rate secured and unsecured bonds within the same pool of securities?**

Looking at the transaction, we would look at the loss given default characteristics of that, the unsecured ones we would have to have a look through into the security itself, and whether that security gave any security for the probability of default on that asset or not, and secondly in terms of what the loss given default characteristics would be of that particular asset. You would examine the security both structurally and the overarching security itself, if the security was coming from an external party as opposed to the physical asset or not to be charged on the cash flow or something like that. Then again you would tend to delve into that, in terms of...just analysing whether the security aspect was worth anything but from a probability of default side and the loss given default side, and if it was worth anything how much was it worth, and if both characteristics will therefore pass in the pool completely.

**12. How would you rate senior and subordinate tranches within the same pool of securities?**

The same approach in terms of superior tranches, you sort of got this debt cushion underneath, the mezzanines and lower tranches like that. So from a loss given default perspective, which would tend to be the key driver here, it is a question of ensuring that the theoretical priority for settling debt in terms of the default are actually going to work in practice and what benefit that cushion will give. I mean, as an example, when one looks at the US market, although you could have subordinated debtholders and subordinate investors, there is frequently a practice where they can exercise considerable influence to exert their own

terms above those which would be quantitatively expected just by holding a certain percentage of the overall debt profile. So you need to take the practice in the marketplace into account as well. And equally things such as if you have any CD which is an investor on that particular transaction they also would have a positive influence typically on how a defaulting obligor would treat its debtors. So there is the theoretical and the practical aspect to take into consideration as well.

**13. When rating a pool of securities, do you factor into your decision making the ratings for underlying assets provided by counterpart rating agencies?**

It would vary. If they were sort of a large chunk of the pool, I want to rerate them. If they were sort of individually smaller and they had current ratings by an alternate agency, I would want to check the mappings in terms of default probabilities for sure between my own agency, if I was S&P, between S&P and Moody. And there are differences, so it may be for example that a B+ rating by Moody's, I might put in as a B by S&P. But again if there were big assets forming a big chunk, or if there is a lot of them. I would want to resample them, if they were very material I would want to rerate them. In practice I have come across pools where they have got two ratings, from Moody's or Fitch, I adopted a mapping approach to that. But again if they are coming across as a large percentage of the whole pool then there would be a need to rerate at least some of them.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

Well typically, someone particularly from an obligor institution has applied for a rating of some sort, it might well be that initially there were looking for a particular rating so they would say look, we would like a rating but it needs to be BBB or A, and the sales or marketing folk might then approach me and say look, could you have a quick look at this and see if there is a feasible expectation to have a loss, and depending on the information available, it sometimes easy to go back and say look, I do not think this obligor will get to that level of rating with what we are doing, in which case it would probably go no further. If it does look feasible then the sales folk will go back and if a contract is concluded we would then ask for information to come in and that would typically be in terms of what the transaction is going to look like, what the profile would look like, what the underlying assets would look like, and that would then be analysed, it would typically be a legal due diligence done to ensure that the various flows of funds would work in practice and there would be no obstacle to that. There would be due diligence on the motivation for doing the transaction on the way that it is proposed, as opposed perhaps, raising funding from the capital market or something like that. There would be meetings with the management of the issuer, and perhaps also with the arranger. And again we would go all through that, and when one has arrived at an appropriate rating having stressed some of the quantitative models on how these assets would behave and interact with one another, we go along to a committee with a proposed rating. The committee would then challenge that, investigate that and then the rating would be assigned and then notified to the issuer. The issuer then can either decide to challenge that rating, if he doesn't agree with it totally, or decide not to proceed with having the rating published.



**15. Tell me about the exit rating clause in rating contracts?**

The sales / marketing function and analytics function were strictly segregated to preserve analytical integrity. So the analysts were not involved in contract negotiations. The introduction of an exit-rating clause or requirement would have been a big event and I imagine it would have been well-publicised (and explained) internally – and probably externally as well. There is (to my knowledge) no extra fee involved for the exit-rating (it is just part of the ongoing surveillance and therefore covered – I believe - by the annual rating fee).

I cannot recall any internal launch of this clause – so my opinion is that the clause was almost certainly already in place prior to 1996 (when I joined S&P). It is difficult to think of a situation where an exit-rating clause could be omitted (other than any isolated internal compliance failure) since – even if that was a deal-breaker for any issuer - the reputational damage of making such a concession would outweigh any fee from winning an individual ratings contract from an issuer. Also, I cannot recall encountering (or hearing about) any instances of an issuer withdrawing its rating without an exit-rating being carried out and published. So I would be of the view that there were almost certainly no omissions of the clause.

**16. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers?**

When I was on the rating side, nothing really. I mean investors were able to ring in to speak to analysts who were familiar with their particular issues. So you might get a call from investors and then to the extent you were permitted to do so, you could discuss or try to respond to any questions they had. On the non-rating side which I moved to in 2003/4, then you are sort of totally firewalled from ratings, and there my main focus was on providing risk solutions to institutions that wanted to buy them for internal purposes, so that might be building up a methodology to evaluate banks, or it might be building a methodology to evaluate utilities, or project finance transactions, or whatever, or general risk advice. So I have been involved on that side of the business as well.

**17. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)?**

For that yes. Certainly S&P, what they found was that banks and insurers were asking them for help and advice and they felt that it is not something they could do from the rating side because it would be conflictual, so they firewalled and set up a separate side of the business that could offer these sort of solutions and that was sort of kept separate from the rating side.

**18. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers?**

I suppose I would help with the marketing and sales process for sure, but my main responsibility then was creating the solutions and delivering the solutions.

**19. Do you have knowledge of future bonds to be sold by your clients – the bond issuers? What knowledge do you have?**

Issuers would occasionally contact you and tell you that they were planning to do a particular issuance in the future, there was even a service I think whereby if they were contemplating a

particular issuance they could operate the rating side and provide certain scenarios of what the issue might look like and get an additional opinion in terms of how that might be rated or what influence it would have on their own ratings, that sort of thing. So that did happen, yes.

**20. How would you describe your relationship with bond issuers?**

It was fairly good. Each of us would have a portfolio of rate obligors, and as part of our business on the analytics side, it was really to keep surveillance of those issuers and to be able to react to their ratings out there and to change if it should be appropriate. So there would be a sort meeting once a year but you would be talking to your rating contact at the issuer at least once a quarter if it was very quiet and not doing very much. If there was a lot of activity going on or if they were going through major changes, positive or negative, then you would have a much more frequent contact with them. You know, you want to know what is going on so you could change the rating if that was appropriate, and they want to keep you informed so that there were no surprises.

**21. What is your impression on notching?**

My understanding of notching from S&P is where there may be something rated single A, or the obligor is rated single A, and you might rate a particular issuance A- or even BBB+ based on it could be structural subordination, it could be non-material incremental probability of default, that sort of thing. I have not been aware of nothing in the sense of downgrading competitors' ratings. My own experience has been that the majority of cases tend to end up with very similar ratings from S&P, Moody's and Fitch. You get the occasional difference. I remember one, I think it was on the channel tunnel many years ago where I cannot remember which way round it was, but S&P and Moody's, one had it CCC and one had it as A, and there was that little justification for the difference I think in terms of what the analyst thought but clearly a huge gap you would not expect to see. I was originally recruited by S&P to provide unsolicited ratings on European insurers, primarily outside the UK, so France, Germany, Holland, Switzerland, that sort of thing. The unsolicited ratings we used tended to be broader so you tended not to have, for example, an A+Pi or an A-Pi, it would tend to be API which is a couple of range. My only experience was that you have some companies who would later switch from the unsolicited rating to a full paid-for rating, if it came out the same or worse than the unsolicited rating, they tended not to publish. Those that came out slightly better would tend to publish. But, they were not sort of unduly conservative other than the fact that you were wholly reliant on public information and what was in the reported accounts, and if there was something that was hidden away, so to speak, it would only come out in a management meeting, that could clearly help. But I mean that is rare as opposed to the common thing.

**22. What is your impression on tying?**

I have heard of that. In one respect if someone comes in for a rating I think we typically insisted that ok you have to sign up so that your rating is reviewed every year, so if you want to withdraw the rating at some point you have to have an exit rating as well, a sort of final rating before you take it out to the public domain. I do not think we ever insisted that you have to have anything you issued rated, so I do not think there is any tying from that respect in terms of if you have an obligor rating, that you have to have any of your issues rated, I think

that was up to the issuer itself if they wanted to pay for that rating. If somebody wanted to withdraw the rating it would be an exit rating, and I believe that was part of the contract between S&P and the issuer so that you could not get into trouble and then just go. And I do recall there were a few cases where issuers withdraw ratings and I think for special cases S&P would even carry out rating some of the cases free of charge if they thought it was of particular public interest to investors. But other than that you can have your exit rating and then a press release or something saying XYZ Company has withdrawn its rating from today, at the date of exit it was whatever it was. Exit ratings only tended to happen when companies were in trouble anyway, I mean one of the cases that I remember getting involved in, I think they has been as high as single A some years previously, the rating had fallen all the way to I think B due to a whole host of problems they had gone through all those years, and at that point they turned round and said look you know we are not getting any benefit from having a rating of single B, so we do not want to pay for it anymore so we would like to exit so it was an exit rating which I think either confirmed the single B or whatever, things like that. I guess it is probably cases where again if they think they are not getting any commercial benefit from being rated, then again why pay for it when they could exit. And I think if they are right in those circumstances then it should not create turmoil in the marketplace. If it did, I guess they would come back or go to another rating agency. I think of some companies where they have 2 or 3 ratings and money has become a bit tighter and they say perhaps we can live with just one or maybe just two, then why pay for several agencies.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

I think that is the case. You cannot sort of buy the rating that you want, but investors want to see ratings in certain cases. I think there are some industries where, I mean insurance industry for example it is difficult in some parts of the marketplace to operate as effectively unless you have a rating, a sort of BBB+ or an A- rating. And there poor ratings would not help. But I mean in other parts of the market, even a poor rating can be beneficial. So if we looked at things like leveraged loans, that sort of thing, I mean they are rated CCC, B- etc., and that is not a problem, there are investors out there that are happy to take speculative debt at that sort of level. But if you are talking of poor ratings like in the case of Enron going under with high ratings, and yet investors continue to demand ratings, that I think is due to the fear of having to rely on something else, and habit. I think a AAA falling over does happen, it clearly should not happen that often, and probably does not happen that often. I guess even a very good rating does not mean that the probability of default is zero, it just means that it is very remote. I mean the agencies do internally sort of really panic when a highly rated entity falls over and they do look into what happened and do we need to change our procedures and everything. So I think the ratings quality so to speak ought to theoretically improve over time at least. But I think even when investors are highly critical of the rating agencies, and they do see strong ratings fall over, which perhaps was not expected, I think it is because of a lack of alternative that they can latch onto, I guess it is habit more than anything else which keeps them interested in ratings.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

I think it will be more disciplined today...my own view on the structured finance transaction is that too many of them were motivated in the past for arbitrage, arbitraging one set of financial accounts for another, as opposed to genuine risk transfer. And a lot of those clearly aimed at creating some toxic instruments and so forth which did not necessarily address particular risk processes but rather just growth. I think since the explosion on the structured finance transactions the agencies are taking it much more seriously, much more focused on looking at the underlying assets, and while structured finance still has a very bad name today, conceptually it is mitigating and diversifying risks, and provided it is doing those things it can be a good instrument so I think the scope is out there to do that and to do that a lot better. I think the sector is somewhat immature still, because I think things have changed substantially both from a regulatory perspective and an analytical perspective and also in terms of the compliance that is required of issuing institutions, investing institutions, and the rating agencies themselves. So I think the landscape itself has changed dramatically, I think it is still an immature market in many respects. I would say it is still early stage, you know regulation is still playing catch up with some of the risks which institutions take, I think many institutions are not as risk focused as they ought to be and they are complying with what the regulations require as opposed to what an inherent risk culture should provide for them. So I think there is still a lot of catch up for all those facets to happen first, I think then we are going to see the development of a more genuine structured finance marketplace which will be sound with structured genuinely designed for risk transfer as opposed to arbitrage.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

I tend to think that they do not at the moment, I think that from a lot of prospectuses that I have seen over time, I think it is still too generalised in terms of the information that is given on the underlying assets or the assumptions which are made in coming up with the score or the rating and I think there is still too much reliance on getting a third party opinion such as a rating agency in terms of how solid or otherwise a transaction is. I do not think there is sufficient information in the prospectus for investors to genuinely do a robust bottom-up analysis of what the risks in the transaction are.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

I think they do. My own view really across the globe is that institutions, investors, are still very much compliance focused, they are still quite short-term focused and risk culture I think is still evolving despite all the regulatory initiatives that have been going on for the past couple of decades and is still going on. So I think market discipline is still not well thought of. I think for the moment the regulation has got to continue to evolve. I think institutions have got to get up to speed with complying with that regulation and then turn their attention to almost looking at the regulation as a by-product of internal risk culture, a robust internal risk framework. I think when that happens it only happens with a few institutions at the moment, then we would see a

lack of fear of actually publishing or disclosing how one is managing one's own risks, and I think we will see much more in the market domain consistent with the spirit of the third pillar under most regulations, and so disclosing what risk culture is, how risk is assessed, how risk is managed, and institutions coming into line with that. But I still think that is some way off. I think mistakes can still be made before we achieve market discipline. I think there is a lot of regulation ongoing, regulation has been subtle now that we are in perhaps a benign economic environment, even being rolled back in some cases. But I think there is so much investment, not just financial, but in terms of time and effort that institutions have got to do to get themselves to that place. That is I think before it is completed, and I think it is only after that that we would get a proactive internal risk management really taking place. So I think if we have any hiccups along the way, I think we can see more problems...fingers crossed that would not happen but I think the jury is still out there.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

I do not think so, I think you described notching as effectively having a lower rating than one from an existing rating agency. I think that actually opens an opportunity. So a potential new credit rating agency that comes along and says, look, we are going to be as honest and accurate as we possibly can, and whether they start off with unsolicited ratings or paid for ratings, if they all come in with accurate ratings and the market or the recipients of those ratings say yes to them, I think that actually creates more ease of entry. In terms of tying where if I understood what you were saying, it is really insisting that if you want a rating from me as an agency, then you have to buy other things from me as well, I think again as an issuer, you would say if someone is not insisting on that I would try that other organisation out. So I think if those practices are prevalent in the market place or some of the market places then that would really pull down barriers for the credit ratings coming along.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

I do not know; it is a difficult one. I think certainly there has to be a governmental role to ensure that there is not a monopoly, and to ensure that there is not an abuse by the rating agencies. I think also to ensure that rating agencies do properly disclose what they are doing and how they are doing it, and I think they should be encouragement for new players or new approaches to come to play. So I think there is certainly a role there as it would be with any industry, and I think that role should be taken quite seriously. I am wary of things where a rating agency would be owned by the government or the government could intervene too much because then there is the danger or politics perhaps influencing the analytics.

## Respondent F

### Transcript for CRAs

#### 1. Background and experience

I am an aerospace engineer; I came here from Europe in 1983. I did a Ph.D. at Princeton University in aerospace. Because I was not a US citizen I could not get a job so I ended up in the finance. So, I am failed aerospace engineer, and I ended up where a lot of other failures end up, i.e. finance on Wall Street. I have effectively had the same job since then, which is to build models of credit risk analysis. There are usually two kinds of analysis, market risk and credit risk, and so I have specialised for more than 25 years in credit risk, and when I was at Goldman Sachs I built some market risk models but that was just a special request. Apart from that, all my life has basically been in credit risk. I worked in a few places including Credit Suisse, Moody's, Citibank, Goldman Sachs and UBS. Since 2000, which is 15 years ago, I have started a consulting firm with Ann Rutledge. Our website is called credit spectrum and guess what, we do credit risk analysis. We have a product call ABSTRAK which does real time valuation of structured securities in the secondary market.

#### 2. Education

Diploma in Numerical Analysis  
Masters in Numerical Analysis  
Ph.D. in Aerospace Engineering

#### 3. Job Title

Founding Partner at R&R Consulting

#### 4. Securities dealt with

I have dealt with most asset classes that exist, in fact even in some that do not exist such as airplanes, real cars, automobiles, mortgages, commercial mortgages, insurance policies, life settlements, exotic assets, medical claims, syndicate shares, ships and movies of course.

#### 5. Impression on Competition in CRA Industry

There is no competition. So, there are the three rating agencies that kind of compete. There was really only Moody's and Standard & Poor's but recently there has been Fitch also. So the competition is essentially between 3 people who share 100% of the market at various points. Moody's used to have a large share and so did Standard & Poor's, each had like 95% each because each deal had to have two ratings so you could have 190% of the market being served by two and then Fitch would get the difference. There was also a rating agency that was sold recently and a few new entrants that are trying to make their name but always using the same methods so the competition in the name of rating agency does exist but competition in intellectual terms does not exist.

#### 6. Is the CRA industry dominated by a few players?

Yes, it is effectively an oligopoly. The SEC does not really allow anyone into the industry. The people they have allowed in do not make any difference because they have understood perfectly well that they would not make a difference. They are marginal players with very depreciated assets, methods and procedures. There is no real change in the paradigm. The

paradigm is still pre-crisis. Some people say it is a duopoly but I would say Fitch does matter, but it used to be a duopoly. I mean, 95% market share each, that was basically a duopoly. But Fitch did rate in certain niche markets. They were more prominent in certain markets than Moody's but globally there was only 2 big names – Moody's and Standard & Poor's. So that assertion was kind of right in the past.

**7. Would you like to see new CRAs in the market?**

Yes, certainly.

**8. How would you attract issuers to get their bonds rated by you?**

There is really only way one to attract clients, and it is by being able to take a deeper analytical approach than other people, and by being responsive. It is the same in the hot dog and the hamburger market too by the way. You should not compete on quality, you should have the same quality, if you want to compete on price that is acceptable because you can lower your price for a bigger deal that you would still make a large enough fee to live, but you know that you have to overcome a lack of brand recognition. But, our quality is unique so we do not say we would give you a cheaper price because we are just going to spend half an hour on your deal. It is either we do it well or we do not do it. And if we do it then we have to charge what we charge. So that is how I would do it, and because our methods are more sophisticated than anybody else's we do get clients even now that we are not a designated NRSRO. We do not advertise as such. In finance, people do advertise, you would see advertisements of JP Morgan and Deutsche Bank, but it is not what you would think of advertising because you are not advertising JP Morgan or Deutsche Bank, you are advertising a kind of feeling, it is called strategic advertising. So they do not really get business like that, it is not like oh I saw an ad in the paper and that's why I am coming to you. Word of mouth is true in general, regardless of how big you are. The same is true of law firms and accounting firms.

**9. Would you accept specific instructions to rate only selected bonds within a pool of securities, or would you exercise discretion and rate the whole pool?**

Alright there are two answers. The first answer is that it is not possible to rate only a subset of securities, you either rate them all or you don't. Now, if somebody says well I do not want to pay you for all three 3 securities A, B and C, and he is looking for a rating for B, this happens, then we can only charge money for B because they do not want to pay for the others. So we have to do the others but we do not get paid. So yes, we would accept any mandate to only deliver a rating with respect to one or many of the securities but not all. It doesn't mean that our idea or our rating would change because of that, it is what it is, but if somebody only wants to pay for one rating, that is fine you know, we are in business. I cannot recall getting such instructions when I was at Moody's and it does not happen to us now, but I know it has happened to DBRS, it has happened to Duff & Phelps that was bought by Fitch at some point; this has happened to them. But usually, the name is useful so you want to have the Moody's rating on every security so it did not happen to me when I was at Moody's. It could happen now, what does mostly happen is that they do not want you at all or they do. Now that happens. The motive for issuers making requests to rate security B and not A and C is very

simple. Usually, the senior rating agencies, the most famous one, would be asked to rate the most senior security. It is hard to make a deal with them on the lower ratings and their reputation is not really at risk if they assign a higher rating on the senior security. But if they assign a very bad rating, i.e. less than investment grade on the other ratings then you would say look, I tell you what, I do not really need your rating on that one because you already know who is going to buy it and they do not care. So, you would go to another rating agency that you can cut a deal with and they would assign an investment grade rating on those lower rated tranches. So you have a kind of arbitrage, you can have an investment grade from Fitch and you can have a nice, you know, respectable rating from Moody's on the A tranche, which is the one that is by far the largest. So that is the motivation – arbitrage.

**10. How would you rate secured and unsecured bonds within the same pool of securities?**

Ok. You have said things that are confusing me. There are two sides to a balance sheet, the left and the right. The left is called the assets, the right is called the liabilities. Moody's rates liabilities, it does not rate assets. What is secured or unsecured are the assets, not the liabilities. It does not matter to the liability, whether it is secured or unsecured because of course what would happen is that unsecured exposures would have lower recoveries if they do default so the rating would not be the same, but it doesn't change the method, you just change the recovery rate.

**11. How would you rate senior and subordinate tranches within the same pool of securities?**

Our approach does not differ for different kinds of securities; we have one approach for all securities in our planet. This is what is different about R&R, we do not have two approaches, our approach has been laid out in about 500 pages in a book called Elements of Structured Finance, and this is our approach to rating securities. And by the way, we are the only agency that has done this

**12. When rating a pool of securities, do you factor into your decision making the ratings for underlying assets provided by counterpart rating agencies?**

No, we do not need that. We have our own method. In our world this is not necessary because we already have a fundamental approach that does not need prior rating. If it was a CDO in the secondary market, then we have the primary market analysis that serves as the rating so we never need to consider other people's ratings because we come up with our own ratings in the secondary market. But this was not my approach when I was at Moody's. When I was at Moody's I was forced to do it their way, whether I liked it or not. Their way at Moody's was to notch people down if their rating was not a Moody's rating, and if let's say they had a security rated by Fitch, then they would say would you like this security rated by Moody's, which of course means would you like to pay a fee. If the answer was no, well we have a rating by Standard & Poor's or Fitch, they would say yes you do, unfortunately they are not as good as we are, so I am going to reduce the rating because I want to be conservative. In the common world this is called blackmail, but in the rating industry this is called notching. This is a common practice that is totally disclosed above board and that I probably did not disagree with in that moral sense. It was a common practice, a commonly



understood practice and perhaps it was disliked because a lot of the times the people on the receiving end of this was Fitch. People would Notch Fitch because if you went to Fitch you would say I will give you the deal and I will give you all these Moody's ratings but you better not Notch them, because I am going to pull the deal. But to Moody's, you couldn't blackmail them like that. So they were at liberty to Notch Fitch down, but Fitch was not at liberty to not Notch Moody's down, so it was an unfair world. But of course you know this already Adah, the world is unfair. Standard & Poor's did the same thing as Moody's, oh yes. Maybe they did one notch and Moody's did two notches.

**13. Now let us talk about your experience in the rating process. How does the rating process work?**

There is a law firm and usually an accounting firm involved. There is a rating agency, there is a sponsoring institution, and there are investors. Now we get involve in the rating of it so we are missing a few pieces. I didn't have a choice on the law firm or the accounting firm, and I didn't know who the investors were, so basically the rating agency dealt with the investment bank that would have to place the security, and all interactions would be between the bank and agency, despite the fact that the sponsoring institution might be Mitsubishi or IBM, it doesn't matter. You really never talk to the guy who wants the money or the guys who have the money. So you talk to the banker and he would provide you with some sort of package of information, usually it is loss and prepayment or payment information on portfolios of loan assets and that would be placed in a pool on some given date, and this placement would cost money. The money would come from the issuance of bonds, the proceeds of which would be used to buy the assets, that is what happens on day 1. So the idea is that if you want to have different access to the cash from these assets in a forward looking manner, you would have to sort of say ok the first 80% would go to one class of investors, the second 10% to the second class and the last 10% to the third class. These would define the levels of the securities, and these would usually be called the attachment points in England which are 0, 10, 20 and that would mean 3 securities, and then you would have to assign a letter grade to these securities, using, and this is where the crux comes, a kind of forward looking model of the behaviour of these loan assets going forward and the recovery upon their default. And when you did this and then you would have a committee, and that committee would then decide on the behaviour that you selected. Was it appropriate? The behaviour of the portfolio of the loan asset, was it credible, was that in keeping with past history, and if they agree to that basically that was the end of the deal, and now you would issue a rating letter. It is a very boring process, going to the movies is much more exciting than doing a rating, trust me.

**14. Besides ratings, what other dealings (services) do you have with (offer to) bond issuers?**

I would have no other business with the banks. There was no other business to be had, I do not know if you mean was I friendly with people outside, did I go out for drinks? If that happened it was not at Moody's. It may have happened to other people...now I would tell you one thing that did happen not in my department but in corporate finance. They had a service that they charged \$5000 a phone call for. And for that service, you effectively say you are a

CFO of a company, you are going to merge with or acquire another company, and you are very worried that if you did that your rating would be affected and that would affect the value of the bonds held and you were going to sell new bonds to acquire the company so you would like the lowest cost of funds to do that. So you call the rating agency, you explain to them what you were going to do and then they would tell you their feelings on whether or not this would affect your rating, and for that you charge \$5000. This is a kind of telephone consulting, I used to call it phone sex but it is very amateurish, very adolescent, usually the answer was no, it would not change your rating, go ahead you have my blessing, and do not forget to send me a cheque.

**15. Tell me about the exit rating clause in rating contracts?**

I have never heard of that because it is irrelevant to structured finance, at least the Moody's way.

**16. Do you initiate (promote) these dealings with (services to) bond issuers or are they initiated by bond issuers (offered only on request)?**

No, I had no idea of the future bonds to be sold by my clients. Actually, there was a company called green tree that signed a letter to do a program called 'frequent issuer program' in order for that to be profitable they had to issue basically every month.

**17. Do you provide additional services like consultancy and risk assessments for clients, the bond issuers?**

I didn't provide ancillary services like risk assessment and consultancy.

**18. Do you have knowledge of future bonds to be sold by your clients – the bond issuers? What knowledge do you have?**

No, I had no idea of the future bonds to be sold by my clients. Actually, there was a company called green tree that signed a letter to do a program called 'frequent issuer program' in order for that to be profitable they had to issue basically every month.

**19. How would you describe your relationship with bond issuers?**

At Moody's it was strictly a professional relationship with the banks. We didn't get comfortable with each other.

**20. What is your impression on notching?**

You already know what I think. It is regrettable but acceptable

**21. What is your impression on tying?**

Tying is illegal but it does happen covertly unfortunately, it is a part of life just like sex in the office is but it is not something that you want to promote and neither is smoking, drug dealing and stuff like that but it does happen, in fact it happens in my building so.... It is illegal and insulting.

**22. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

Yes, very much so. The regulatory demand for ratings drives the industry, not ratings itself because of government interference.

**23. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

The sector is not mature because it is inefficient, there is no theory of valuation in structured finance, it is the only reason. It will be disciplined when it achieves efficiency. The maturity has to be enforced. Usually maturity is enforced by you leaving home and having to make money. That makes you mature. If you can stay home and your daddy is your pocket book, then you stay immature much of your life, which is the case with most children today, they stay home on average 10 years longer than I did, actually 15 years longer than I did. So that creates immaturity having no responsibility. So maturity and responsibility go together. In Europe this is called noblesse oblige, and that does not happen here in America, there is no concept of noblesse oblige. In finance there is no such thing as responsibility, we used to have it but now people feel no responsibility. So it is free for all, get it while you can and that leads to catastrophes. But it could be different.

**24. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

Well they have enough information alright, their incentive is not there but yes they do have enough information. Incentive is very easy in finance. Incentive is either to lose your job or to lose your money. I mean if you had no such incentive then you were going to do whatever you want.

**25. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

Yes, they do not rely too much on them, they rely exclusively on them. Those people know even less about finance than the people they regulate. That is not a recipe for good regulation. I mean, I do not know if you play any sport like soccer or basketball, but the average referee in basketball knows the rules of basketball more than the average player. Otherwise, there would be all kinds of arguments. The referee has to be more knowledgeable than the players because otherwise you are going to start questioning every decision and then it is free for all. I mean if you were going to have a referee then it has to be a knowledgeable referee and that is not true in finance

**26. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

Not really, they do not create a barrier to new CRAs, the barrier to new CRAs is the Securities and Exchange Commission in the United States and ESMA in Europe. It is too bureaucratic, the people there do not have the ability, the intellectual ability to judge whether something is rational, acceptable and grounded. They are lawyers, at least in this country, and lawyers only understand the law. Given that, they should not be in a position to judge a rating agency's method that they do not understand anyway. So they are the problem, they are not the solution.

**27. Is it desirable for the state to intervene in increasing competition in the rating industry?**

The government has intervened by designating people using the NRSRO system. There should be no such designation. There should be a free market of competition. What would happen is that there would effectively become only one rating agency like there is only one

government right, the UK government does not tolerate competition. In fact, when Scotland wanted to apparently separate a few months ago, all hell was breaking loose. If there was one thing the government cannot stand it is competition. But ratings are like this, effectively what would happen with free competition is that there would only be one surviving rating agency. The reason there are so many is because there is effectively no competition. Everyone is guaranteed that they have a piece of the business. So, that decreases any government intervention creates a lack of competition by preventing competition. By actually pretending to promote competition they reduce it. This is very common, especially in this country there is something called anti-trust. Because there is an anti-monopoly what happens is that there is an oligopoly, every American industry is an oligopoly. The computer industry, the beer industry, the furniture industry, the car industry, the book industry, all these are oligopolies. But it is true there are no monopolies.

## Respondent G

### Transcript for Issuer

**1. Background and experience**

10 years experience in project and structured finance

**2. Education**

Master's Degree

**3. Job Title**

Structured Finance Manager, Sumitomo Mitsui Banking Corporation

**4. Projects Involved In**

Power and water projects, renewables, transport, mining, aircraft, shipping and real estate.

**5. Securities Dealt With**

CDOs and CDS

**6. Impression on Competition in CRA Industry**

There are only two worthwhile credit rating agencies, Moody's and Standard and Poor's. They do not compete with each other because the banks I know use them both at the same time as required by ESMA regulation. The same regulation encourages the use of an emerging CRA but it isn't mandatory so we do not have a commercial or regulatory incentive to use them.

**7. Is the CRA industry dominated by a few players?**

It is a duopoly in my view. I do not think Fitch have done enough to alter the market structure. If you consider their global market shares, Moody's and Standard and Poor's still have a grasp on 80%. I think Fitch competes with the emerging CRAs for the remaining 20%.

**8. Would you like to see new CRAs in the market?**

It would be nice to have a third, fourth, maybe even a fifth opinion if they are as good as Moody's and Standard and Poor's, and cheaper to deal with. The main thing for me would be their global market presence and the intelligence thereof that comprise their ratings, this is where I think Moody's and Standard and Poor's have an edge over others. They have greater intelligence and spread in numerous markets.

**9. How would you select CRAs to rate your bonds?**

I am bounded by SMBC policy to approach only Moody's and Standard and Poor's and to announce the two. It is a written rule here. However, we receive Fitch's corporate ratings for many of our business units like in Aviation, as well as from Japan Credit Rating Agency (JCRA). Our head office is in Japan so that explains it.

**10. Do you request CRAs to rate just one or a few tranches of debt instruments within a large pool of securities?**

Yes I would, and if they do not sense any dependency between the bonds they will comply but this is very unlikely as the bonds in a pool have common assets all over as you analyse them thoroughly. However, the reason why I would still make this request is to promote the issues to designated bondholders'

**11. Do they (the rating analysts) rate just the tranches requested or do you rate the whole pool of securities anyway?**

I know with certainty that they rate the whole pool, but from our point of view it is the transaction cost that we want to minimise because our fees go up as they rate more tranches.

**12. Why do they rate the whole pool?**

They rate the whole pool to make a judgment on how the parts fit and if the structure is solid to produce the cash flow that it suggests it would. Essentially it is in all our interests to ensure that the prospect of insolvency is most remote in every issue and so the rating agencies specialise in vetting the whole structure to determine this.

**13. Do the supplementary tranches rate as high as the main tranches you requested to be rated?**

Secured bonds will always have higher ratings than unsecured bonds if they are in one pool.

**14. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

A senior tranche is less risky and pays less so its rating tends to be higher than a subordinate tranche with more risk and higher pay-out, albeit more uncertainty.

**15. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

Yes, but we do not usually let the other agency know that they have been rated before. We like to get their independent rating for our securities. Telling them about counterpart ratings will not help them to be independent, or help our comparison.

**16. Now let us talk about your experience in the rating process. How does the rating process work?**

It is a standard textbook process at SMBC, maybe because of our Japanese background we go by the book. When we want a rating we apply to the CRA, make an agreement, agree on a fee and provide all the records they want. Depending on the project, the analysts will visit our office or the site of whatever facility it is - a ship, transport terminal or aircraft, just to confirm the records. After a while they assign us a rating and if we are pleased we ask them to make an announcement but if we are not please we will request for a review. I can tell you that not all our ratings are at the top end.

**17. Tell me about the exit rating clause in rating contracts?**

There are occasions when new opportunities come up or a security reaches the end of its cycle and ratings are no longer needed, and therefore we do not need to keep paying for it. On such occasions we trigger the exit rating clause. In the case of new opportunities exit ratings serve as a stress test for our forecasts in taking that opportunity. I agree that it can be a fraught process if the clause is triggered by the rating agency and not ourselves, but like the original rating process any differences in valuation will be discussed, but that is not to say we always get the exit rating we think we deserve. In my experience exit ratings tend to be adverse because we are at a point where neither we nor the rating agencies feel obliged for the yield of the structure in question.

**18. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

Just ratings for now. We have some contact for corporate ratings when we need them, and when we need to promote ourselves to borrowers.

**19. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

We initiate them.

**20. Do you receive additional services like consultancy and risk assessments from rating agencies?**

That will be a no no.

**21. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

Yes, we let them know the projects we have in the pipeline. We think it is important that they know all of our current as well as our future structured projects.

**22. How would you describe your relationship with rating agencies?**

Our relationship has been fantastic up till now. Sometimes you can become the preferred financier because the borrower compares ratings to see which lender is stable and less likely to harass them. We've used our ratings to outplay other financiers many times especially in niche areas.

**23. What is your impression on notching?**

This is the reason why we do not disclose our counterpart ratings. We do not like to think that we may have been notched. I think that notching is an intimidation.

**24. What is your impression on tying?**

This is also an intimidation if it happens. In some respects our constant dealing with Moody's and Standard and Poor's is because of our environment and what our peers do. For everybody's sanity we need to solicit comparable ratings and that's fundamentally Moody's and Standard and Poor's.

**25. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

Yes, it is different in that sense. However, I think ratings become poor over time if there is no ongoing review. Some of the failed ratings that I know were for products that started off really well but they stalled because of bad management. I would not say the ratings were bad as well, they were just sluggish to review. Who has the capacity to review every ongoing project? Not all rating contracts are for the long term. Maybe the project managers can call in rating agencies to review the project every now and then but they won't do that when problems are rife and they risk a downgrade.

**26. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

I think that structured finance has been around for a long time but there is still a lot of money to be made globally, and a lot of relationships to be built between the public and private sector to solve big infrastructure problems. Structured finance is still growing and will take a very

long time to flatten. As for market discipline, you will always find unscrupulous deals and unscrupulous dealers in any market; it has nothing to do with maturity.

**27. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

The clients I deal with are very up-to-date and on the ball. We know each other inside out and it is not for bonds per se, but they can choose another lender if they get better terms. So it is more like disciplining us for our terms and conditions because they are also looking for the best for themselves.

**28. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

The government also has an interest in structured finance to generate the finance for its capital projects, so regulators bear that in mind when fashioning the rules and leaving the door open for market initiative. We all need flexibility for the deals to be dynamic, which is why it is called structured finance - it is financing tailored for a special need. The alternative would be to have too much regulation but this will stifle the sector. The dependence on market participants might have been abused at some point but it is still the best alternative.

**29. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

Yes of course, any form of intimidation takes your freedom away.

**30. Is it desirable for the state to intervene in increasing competition in the rating industry?**

No, I will prefer for the state to address events of market power abuse on a case by case basis as they are already doing. I know S&P just received a heavy fine, I do not know what for but that's good enough. Large scale intervention is usually redundant.



## Respondent H

### Transcript for Issuer

#### 1. Background and experience

I have a fairly unusual educational background, the old college I graduated from a very old college in Maryland called St. Johns College. Basically I got a job in New York because like you I was interested in Finance and it was quite hard for a great books major to get a finance job, and I landed in the Corporate Trust department. In the United States, by law any corporation that issues corporate debt, and by habit any town or municipality generally appoints a trustee to act on behalf of bondholders in the case of a default. That was how I got my start and I spent a year at a Japanese bank and eight years at the bank of New York, which is a major corporate trustee. For the first 4 years I managed a wide variety of debt securities in a corporate trust capacity. And then in America by 1989 the junk bond crisis hit, and I was switched to a team that did nothing but managed defaulted junk bonds. So I have an extensive background in bankruptcy and restructuring, and what happens when large companies go bankrupt and when mergers are made. And that experience had gotten deep. I have reorganised an apparel manufacturing firm, we reorganised a motion picture firm, anyone who has been involved in bankruptcy and restructuring in America has done a lot with airlines – they go bankrupt here every other year. And I have also been involved in mining companies, a bunch of real estate and a variety of operating companies. In 1994 I switched hats, I took a job as a Distressed Analyst and it was for the New York division of ING. Their business was lending to hedge funds, and hedge funds had taken large positions in these distressed securities that I knew a lot about. Normally if a bond is not at least single B rating, I generally can get a broker dealer to lend money against it. But ING at that time was not a broker dealer, and they could lend if it wanted to as far as it understood the asset, and their collateral, and their value. So it was risky business for a while because we were the only one who did it. And so you charge a premium because there was no competition, and I was hired as an analyst there to independently value these positions because there was no identifiable market price for the positions. They would trade once a month, sometimes less, sometimes more, and you just could not believe, if you got a quotation, you could not believe it. And so the first job was to verify the value of the collateral. Within a year they found out that I could put a deal together and I became a hedge fund lender for the next 5 years. I had an emphasis on real estate at the time, and then from 1998 – 2002 I stayed at home and was a full time daddy, then I took a job at America's Export Import Bank, the British have one and most of the big European countries have one. They hired me because they like my airline background, the Export Import bank of the United States helps Boeing compete with Airbus and the Germans, the English, the French and I think the Italians all have an Import Export Bank that supports the activity of Airbus around the world. And so it is kind of helping your manufacturer sell their planes, try not to take too much risks, and create a level playing field for your country – so that is what that job was like. There are some people who really should not try to work for the government, and I am one of them because there are so many rules and so many

procedures that do not make sense. It becomes very difficult for a practical person to put up with. I just found so many things going on that did not make sense and I have a hard time sticking with it. So I quit and did some consulting for some New York banks, they were worried about their hedge fund risks, and then in 2007 I got offered a job as the treasury Credit Manager for Webster Bank, which is not a very bank - £20 billion maybe. As banks go it is pretty small, but it is in the top 30 of banks in the United States so regionally it is a force and I was the Treasury Credit Manager and that was right on the edge of the great disaster, and so I quickly became the bank wide counterparty credit officer, because you have some counterparty relationships in Treasury, but counterparty risk is a little bit like rust that wherever you look you find some and we ended up categorising I think 12 or 13 different kinds of counterparty credit risk through Webster Bank and keeping track of all of it. And later on I got involved in a government lending initiative and was a credit executive for the entire Treasury of a bank-wide counterparty credit and for a new municipal lending initiative. And that lasted from 2007 – 2011 when we parted ways, and in January of 2012 I founded my own firm, and oddly enough I was hoping that some of these new laws that got passed in America that banks and securities companies would not be allowed to rely on credit rating agencies in their work, and that they would have to have their own independent opinions about the credit quality of what they owned. And I was hopeful that that would generate some work, and to the best of my knowledge it has not. There was a law that was passed in 2008 or 2009, it is the Dodd Frank law and then they had about 3 or 4 years to make the regulations to implement the law. And in due course, the regulations are on the books in America that every bank should have an independent opinion for the creditworthiness of the positions it holds, that is not allowed to rely on a credit rating agency to support a risk rating, and I had thought that that would be a kind of inclement act for credit professionals like myself who would love to show you out how much risk is in something, and it has turned out I think not to be so and I do not know the truth of it. The truth of it would be pretty expensive to find out, but perhaps it would require what is called in America the Freedom of Information Act filing and one could ask for how many times the chief regulators have gone to the large financial institutions in America and asked them how many agency rated exposures they had and also ask them how many independent opinions they had and about what the credit quality of those exposures were. The Federal Government would have to give an answer but before they had to give an answer they would have to say how much the cost was for them to do all that work, and that would not be a small number, and somebody would have to be willing to write that cheque to find out. But my guess is that based on the small bank executives I have talked to, and the bank recruiters, the bank CFOs and Treasurers are just not worried about getting an independent credit assessment of their exposures. Why they are not worried I do not know. My guess is it would not be the first time, it is pretty rare, but the senior regulators in the US have basically just decided that congress was wrong to demand that independent opinion and they have dutifully created the regulations that require it, they do not just enforce them – they do not just ask. That is my guess, and the reason you do not see any new rating agencies is because none are needed, and the reason none are needed is because it is not the law, and

it is not because the regulations do not require it yet because the regulations are not enforced. To my mind, that creates an issue of the independence of executives in American banking because the regulation of American finance has always been...since the great depression, pretty loose and pretty tight. It is what I call bad person risk, in America you can actually get away with a lot, do a lot of bad stuff and get caught. But if you have to pay some taxes and you happen to look like you might be employable and pay some more in the future, the kind of rather rehabilitate you quickly than lock you up and throw away the keys. And so as long as they do not think that you are a bad person, then you can get away with a look. And it is kind of like that in banking, there is always a long list of rules to follow, and people more or less follow them, but the rules were always complicated enough that if the regulators wanted to find something they would, and it depended on whether they thought you were a bad person or not, and how bad a person you really were. And in my opinion, what has happened with Dodd Frank and the ensuing regulations is that regulation for Banks in America has roughly tripled, and so there is no bank in America that is in compliance. There are people trying really hard and they are staying up late and waking up early trying to comply but the fact of the matter is that it is harder than ever to comply and it is a question of whether the regulators want to pull the trigger or not. We had a scandal over here about how cosy the Federal Reserve is getting with Goldman Sachs, and that is probably an interesting question but it is the way money and power works in Washington. There is a non-profit organisation in America called the Liberty Fund and they publish a bunch of all the economics textbooks. It is pretty right wing, it is pretty free-market and I have looked through, I buy very little from them but I have looked through their list a couple of times and there is one Professor they note that won a Nobel Prize, and he won a Nobel Prize for documenting the process of how industries come to control the regulators who regulate them. Whether it is defence companies controlling the defence industry or food companies controlling the Food and Drug Administration, whether it is Drug Companies controlling medical schools and drug approval processes, or whether it is rich powerful bankers persuading politicians to lean on regulators, it is a cycle that happens, and the guy won a Nobel Prize for describing how slowly but surely this stuff happens. And so I consider it to be an inherent problem. An inherent long-term problem of regulators is how not to be captured by the people you regulate and that capture does not have to be hard, it does not have to be suitcases of \$100 bills in some Swiss vault. It can be much more subtle than that and it is. So my guess is that we have a bunch of new laws in America about credit rating agencies and independent credit analysis and I think the senior regulators are not at the head of our regulatory structure which is you know...America dislikes centralised government with centralised authority. So when you talk about major financial regulators you are talking about 6 different branches of the government that can all fight over whose turn something really is, and Dodd Frank really made it clear that for big institutions it is the FED, and that is why it is so disturbing to have these unflattering conversations recorded about how accommodating FED regulators can be. But that is my big picture. I have been involved with rating agencies in many ways, I mean I was sitting in the Webster hot seat watching counterparty credit risk become a word on the national news

within months of when I took that job and so when you are worried about the whole financial system as a whole and your relationships to it, you quickly get worried about everything. And so Webster happened to own a big pile of CDOs so I am very familiar with that structure. When I was into hedge fund lending, we did work with that structure. In America the heart of the financial crisis was residential mortgage-backed securities, so to the extent that you wanted to have a clue about what was going on, you learnt real fast. While I was at Webster they purchased with my approval, starting in 2010 and into 2011, they decided that some of the senior CMBS was mispriced and they had about \$500 million of that product which is a pretty good size bet for a \$20 billion dollar bank. So all those structures I have worked with. In America at least, bankruptcy and restricting is very different than in the UK and Canada. What the UK and Canada call bankruptcy we would more likely call in America liquidation. When you turn a company over to the court you just assume its debt, and you sell the parts for whatever they are worth, to the extent that the company should continue to operate then the English and the Canadians tend to think more that people with money on the table should get together and figure that out if and how it should continue to operate that is a deal to be struck. In America it is not struck out of court very often, it is very rare to be get an out of court restructuring. Mostly what happens is in Chapter 11, which is for the purpose of reorganising companies. Should chapter 11 then fail, then a case could be moved to chapter 7 where you just let all the employees go and you sell off the buildings and the machinery and whatever the business is, that is you just liquidate it. My experience is pretty deep in Structure, and what happens in America is when a restructure does not work, how things fall apart is related to law and so a lot of my expertise is specific to America. I have done a couple of international restructurings and it is just very different. In the UK I was involved in a Canadian deal maybe in a small way in one or two UK companies. I was involved in the reorganisation of Philippine Airlines, a big lender to the EXIM bank, and I was involved in some south American and a little bit of Africa. There is a lot of political pressure in America for the Export Import Bank to do more with Africa and so we tried to figure out a way to doing it without being stupid. I have got a lot of international restructuring experience.

## **2. Education**

BA Liberal Arts, MBA at NYU, CFA.

## **3. Job Title**

Former Senior Credit Office at Webster Bank, Former Senior Loan Officer at the US Export Import Bank, former Senior Analyst at ING Capital

## **4. Projects Involved In**

Credit Risks

## **5. Securities Dealt With**

CDOs, Trust Preferred CDOs, CMBS, Interest Rate Derivatives, Aircraft Loans and Guarantees

## **6. Impression on Competition in CRA Industry**

For practical purposes there are really only three. I have my virtual assistant look up to 10 NRSROs in America and if you look at the history of that list I think you will find several that

were kind of entrepreneurial before but after the great recession in 2008/9 they do not exist anymore. I think at one time the number of organisations trying to be rating organisations were more like 15 or even 20, but we are now down to 10. But of those 10 they are very specialised, but as far as I know most of them do not even try to compete with Moody's, S&P or Fitch. I mean Japan Credit Rating agency is on the list. There is an old American firm called Egan Jones but it does proxies and not really credit ratings, and we have got a Mexican firm on the list and I do not know whether they are active across the border or not. From what I can see their market share is just extremely small.

**7. Is the CRA industry dominated by a few players?**

My impression would be that right now the market is little changed than what it was prior to the crash. Fitch is a player so that makes three so technically the word is an oligopoly. I am not sure there is a natural reason for their dominance, but the forces that hinder competition in my guess is the reason the American regulators look the other way when it comes to independent credit ratings is that the job of a counter party credit executive and treasury executive is kind of half a credit job and half a regulatory job. The half that is credit is telling some very senior executives that they might be taking a little more risks than they think they are, which is basically telling them that they are not quite as smart as they think they are, which unless you have enormous diplomatic skills tends to rub them the wrong way and that is not good for your career. The other thing you need is you need to have good credit files and they need to be documented and all the things that regulators might want to see have to be in files so that when a regulator shows up and asks for them, they see a neat intelligible file about why you are doing what you are doing, why it makes sense, and any documented records that you are actually monitoring your risks. And so part of my job was to interface and to meet with the regulators when they showed up and explained to them what they were doing. To my knowledge that is the reason why the regulation in America for an independent credit analysis is not enforced. It is because if you look at Moody's or S&P or Fitch, you can go to their websites and you find an absolutely enormous amount of information all of it free on how they think about the world in general, on how they think about the tobacco industry, how they think about the beer industry, how they think about measuring risks in banks or consumer finance companies or agriculture and you really have telephone book after telephone book that is free to the public that those companies have built up over 100 years and what would be required if the Federal Reserve or some Federal agency was really to say what is there is not good enough, we need an independent analysis, then you would need to write a new encyclopaedia just like the Moody's and S&P website. And you would have to say excuse me but these guys have been in the business for 100 years, it was kind of embarrassing how they performed in 2007/8, we are just lowly paid government bureaucrats and we are just much smarter than they are, and this is the way to think through credit risk in general, and I think the senior regulators took a look at that project and what was really required to be a credible alternative to Wall Street of the world on a Moody's and S&P website, you have to remember that Warren Buffet did not see the great crash coming. He made a bunch of goons, he thought the commodity boom was for a real and he bought oil and

he sold it a couple of years later and lost a couple of billions. He did not see the credit crisis coming he had to testify in front of congress with the CEO of Moody's and he said he did not see it. So some really smart people did not see the credit crisis coming, and of course the smart people did and they made their everlasting fortunes but to my mind a really independent credit assessment would need to come from a really independently minded credit analyst who is willing to go out and say this is how Moody's does it, this is how S&P does it but they are wrong and the reason they are wrong is X and Y and Z, and if you believe that then the risk is something else and here is what it is. There are so few people with that kind of intellectual stature to begin with in Finance, and they all have much better paid jobs doing something else. Investment grade credit analysis is not a high paid job in America, so if you have talent you do something else. So because of the undergraduate education I have had I can be a call merchant and just try to show up and say well exactly why do you think that? Why do you do things this way? It is a valuable role, it is a limited role in an organisation but it is a valuable role because obviously in 2006/7, New York and Wall Street would have been a much healthier place if we had a few highly place merchants asking exactly why you think this is all going to work out so well. So we could talk about some specific instances but I was specifically involved with what I called Trust Preferred CDOs. Trust Preferred CDO securities are very junior subordinated debentures that banks can issue, and should they be unable to pay interest they can defer interest for up to 5 years without it being a default. It is kind of quirky how these securities were ever permitted to exist in the first place, but what is documented is that about 10 years after they were allowed to exist, Moody's said we have a 10-year record, and one of the key benchmarks for an investment grade rating is a 10-year track record in anything. If you do not have a 10-year track record, if you do not have a full cycle track record, it is hard to say whether anything is investment grade, there are other reasons to think so. But one of the key metrics is 10 years key data and it was about that time that the first pools of Trust Preferred CDOs were formed and they all performed very well. They were formed at about 2000/1, and they performed very well until 2006/7 and it was a great ride. I have seen 95% - 98% of those pools rated investment grade and the pool itself would get cut in half or more, and so that is the personal rating agency embarrassment that I happen to know very well. It was a problem for me because I had a Treasurer who I worked for who bought the stuff and liked them a lot, he thought he understood it, and he was supported by a CFO and a CEO who liked the stuff and thought they were very smart and all you had to do was to go back to any American banking crisis, whether it was 1989/1990, 1974 or in the banking crisis further back, and you knew all that stuff was crap...you literally knew it. All you needed to do was look into data and the decision of Moody's to say 10 years of data makes an investment grade rating possible is an interesting idea. Yet in comes into big themes in finance that you just bump into when these things happen and you have to get into some kind of new era kind of thinking that the world is just not the way it used to be, and the American regulation of banks and financial law institutions has improved so much that a recession like 1989/1990 will never happen again. When you put those ratings on those pools you have to say those things to yourself or what you are doing does not make any sense. It is

really kind of boring in a way, my mother had a fascination in the stock market and I started reading about it in the 1970s and most of the really important things that were written were written by people who had studied or lived through the 20s in America, and the huge bull market and the depression afterwards. One of the books that I remember reading that most people though was just mandatory to be a serious student of investment was called Extraordinary Popular Delusions and the Madness of Crowds. They were financial bubbles over tulips in Amsterdam in the 1600s, there was the South Sea Company in England in the 1700s, the whole phenomena of bubbles seem to be natural, it seems to be human. What is interesting about the last 30 years of my career is that the number of bubbles seems to be growing; they seem to occur more often. And exactly how and why is an interesting question.

To summarise, the rating agencies are in the same place that they were in 2007, the reason that Moody's, Standard & Poor's and Fitch dominate the rating industry is not because they are so good, and not because they are so smart, but because people like them better than who they compete with. I do not know why, I have lived in America all my life and it seems to me that there is plenty wrong with this place. When international investors want somebody to trust and they want to put their money someplace safe, they go to London or New York, they just do. I guess that means Moody's, S&P and Fitch are less bad than their local equivalents. I have heard some pretty scathing things about Korea Credit Rating Agency and nothing in the country is less than double A (AA), you just can't find one. And so some rating agencies seem to be dominated by their local clients in a way that New York firms were thought to have more independence. The fact is that Moody's, Standard & Poor's and Fitch get paid by the people who issue securities - and it is very hard over time not to make them bend when you pay them every day. It just takes enormous amount of character for the executives at those firms to do the right thing. Often if you are the executive in a hot seat it is walking away from millions because you have an opinion.

**8. Would you like to see new CRAs in the market?**

I would like to see good credit rating agencies. I am not sure more is necessary. If we have already got three sophisticated opinions about what the key factors are in rating an oil and gas company, I am not sure having six is helpful. What is probably more helpful is getting one of the three not to deviate from its own principles and that is a much trickier question. Like the housing crisis in America, in a nutshell, the average price of the average house in America has gone up 5% or 6% every year since World War II. In recessions it would either be flat or go up 1% or 2%. Mostly big towns get bigger and there are some small towns that actually get smaller like in really rural places. You have farm towns that actually have problems with too many houses. But for most of America the population is growing, that is really a small insect on the elephant of American housing, and people just got it through their heads that the price of an American house would just not go down, but of course it was a lot more sophisticated and what launched the bubble in full force was when people started ignoring the key rules of lending just to get stuff done. I am not sure I can quote them all but I think there are 5Cs of credit – character, capacity, capital, collateral and conditions. I might knock it down to three,

after 30 years I might say character, cash flow and collateral. Long before the great depression there was a famous phrase on...they called JP Morgan to testify in front of the Senate, the great JP Morgan, the second one who founded the New York firm, he just bailed out the entire US Government and there were senate hearings about why the US Treasury needed JP Morgan to float a bond issue. He was testifying to congress and somebody asked him what the most important part of credit was, and he said it was character. That is my experience too in bankruptcy. Under American law, if somebody does not want to pay you back, they can make it really painful to collect, such that as a lender you are never in a position to profit from that relationship. The cost of collection is always so high that you lose all your profit. You may get your money back but you never make any, and the other two keys are just collateral and cash-flow. Perhaps over-simplistically I would characterise every bubble in financial history as the separation of asset bond values from the ability of the assets to generate cash. It is just funny but it is the same thing every time whether you look at it from the 1920s, or what happened with junk bonds in the 80s, or what happened with internet stocks in the late 90s, or what happened with housing in 2006 and 2007, it is all the same story. When you looked at what houses were selling for in America and what you could rent it for, the amount of the rent would never ever pay the mortgage on the house, and when that goes on for an extended period of time, the longer it goes on, the worse the fall is. That is just my theory of credit bubbles, and we are trying to create some really impressively complicated regulations and models to keep that fundamental human phenomena in check, and I am just a little bit of a student of history and I have no reason to believe that there is a magic regulation or a magic model that puts the genie back in the bottle.

**9. How would you select CRAs to rate your bonds?**

I have never issued a bond so I do not know. It depends on the laws, on which office and which country they are in. but

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

I do not really believe that, it is not in my experience and it does not make sense to me. For instance, in these trust preferred CDOs, we got intensely interested in those because we were losing buckets of money and I worked had in taking those things apart and putting them back together again as anybody. The job of rating one tranche and pooling that and rating all of them is almost the same job because you have to understand how much risk is in the pool as a whole, and if you do not understand that you cannot start. And then under the scenarios where the pool takes larger and larger losses, you have to pinpoint exactly who is going to get hurt and when they are going to get hurt. You really cannot get a single answer until you have done the whole pool, and so the only thing I have ever seen, personally, is that often the first loss position are sometimes the riskiest one two or three positions in a very big pool to be rated. It is my suspicion that banks who issue that paper request that on purpose. It is not like the rating agencies have not done all the work to rate the whole pool to ten different tranches are going to turn down 50% more money to rate 13 tranches. The reason is if investment banks know people who want to buy those tranches, and the people who are willing to buy



them have a much rosier outlook, then the credit rating agency is going to hand out, and they do not want to show those clients that rating. So the only things I have seen in pools is the riskiest tranches not being rated and the more senior tranches having ratings, and it either gets cut off at investment grade, or sometimes you would see a pool that is tranching all the way down to B or something but there is always a first loss position, another name for it is an equity stock, or an equity piece, there is always the financial party who takes the first loss and that piece is generally unrated and it would be a very odd thing to have senior pieces rated, a middle piece unrated and junior pieces rated. I have never seen or heard of anything like that.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Previously answered

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

Previously answered

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

Previously answered

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

You have to distinguish two kinds of issuers. People who issue and maintain ratings all the time like an S&P 500 company or somebody who publishes issues regularly. There is really one agreement that was negotiated a long time ago, and you think about how many securities somebody like Goldman Sachs issue, they funded themselves with securities and so their arrangements just as an issuer with a rating agency to issue would just be 2 or 3 times a month, sometimes more, it is just an on-going conversation. A very different situation that I got to see at Webster Bank is some little town that wants to float a school bond to build a school, and they have not been to the bond market in 10 – 20 years, they would actually hire a banker like from Webster to help them communicate properly with the rating agencies. And it is not a corporate rating, it is a municipal rating, but it is the same story that you have to negotiate an agreement and go through a process to get a rating, and that is very different and those people are much less sophisticated, they might hire somebody special just to help them manage it because they only do it once in a while. And so for somebody like Webster, that was a good vantage point for me, and this is the most important point I am going to make in this entire conversation – it is that question 13 and what you are missing there is what exactly is in that agreement that the issuer signs with the rating agencies. I do not know this for certain, because I have not seen the agreements, but I worked for a man I got along with pretty well who was in charge of managing Webster's relationship with the rating agencies and the part you are not clearly getting here is how much information the rating agencies get is a negotiation. They can get very little, or they can get everything and the reason the rating agencies became so powerful, and the reason investment grade credit analysts were an endangered species in America, was because in the investment grade world, for a long time

the rating agencies had a really impressive track record. They had a really impressive statistical track record of saying whether something was investment grade or not, and more or less moving out of that bracket they are also slow to mark down and they have a reason for that but the statistics are very good. And the other reason that investment grade credit analysts were an endangered species is my opinion that large rating agencies are up to their eyeballs in insider information. They have access to tons and tons of data that never appears in an annual report, that never appears in a quarterly report, that never appears in any other public documents, and that is why they are respect it. One, your own guy cannot do any better than they do, and two, they are up to their eyeballs in the real thing. For companies trying to hide something, Standard & Poor's and Moody's have a much better chance of catching them than your guy with half the data or 20% of the data that a rating agency would ask for. And when it came to these mortgage pools, the amount of data a rating agency could ask for was pretty much everything that existed if they wanted to, and that includes a ton of information that would never get into the prospectus, they had access to it, and they could withhold the rating if it was not forthcoming. They have lots of leverage to get the right information and that is why I told you in the beginning that I have strong opinions that the most guilty party that has gotten off lightest from the great recession are the rating agencies because you look at what they do and how they do it and how profitable they are, it is virtually unchanged. And arguably I think the worst offenders are always people who buy. If you buy stuff that does not make sense then it is just lousy what you do, you are a lousy banker. It is funny, up until 2008 I thought the most dangerous person in the world was ..... Boyer, because he really could make you believe you knew what you were doing when you were in serious trouble. And I changed my opinion in 2008, the most dangerous person in the world is a third-rate banker because you buy all sorts of stuff that should never have a market anywhere. But second on the list after the stupid banker is the rating agency because it is their special privileged position, privileged by the fact that they are not investors, they get paid cash upfront for an honest opinion, and that is what they will tell you – that all they provide is an independent honest opinion and that too is a lie because they are up to their eyeballs in inside information. It is not the information you and I can get, and that is why the market and the bond managers give them such enormous respect, because one, they have a really good track record, and two they are up to their eyeballs on the inside stuff so if anybody could have turned this off before it happened, it would have been them.

**15. Tell me about the exit rating clause in rating contracts?**

I am unaware of such a clause or what it means.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

Rating agencies sell lots of stuff now. I wanted to learn some stuff, get a rating agency point of view on some stuff because I had some questions that needed to be answered and I picked up the phone and called Moody's and got a client contact, a salesman for Moody's, and Moody's was doing basically no business with Webster bank and as the junior person I not only dragged this guy all the way from New York to the middle of Connecticut, but he brought

one of his senior colleagues along and I got to pick their brains for an hour and half just at the suggestion that I might do some business with Moody's because they would sell me credit ratings with all the Trust Preferred CDOs I had, if I decided I needed to go to management and said we just needed more fundamental data about what is in our pool, I think the total was around 2000 banks. Most people do not know how over-banked America is but there are lots of little banks in America, about 7,500 banks and lots of them issue Trust Preferred Securities, and so analysing 1,000, 1,200, 1,500, 2,000 individual credits, that is not a human job, you got to buy a solution for that. You either have to invent a model. Invent a procedure, you have got to dump some data, you have got to hire an expert even though it has just been proven to the whole world that they are not experts, but you have got to do something. And so you do have an influence over those people because they have a lot of stuff to sell. If you want everything that Moody's or Standard & Poor's have to sell just as a consumer of credit opinions, it is an easy bet it is now six figures a year if you want unfettered access to everything they write. That is not talking with people, but that is just wanting to know everything they publish.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

They came to me offering all this data if I wanted in addition to rating, sure. Webster bank was itself rated, it is a large bank, it was rated BBB, I do not think it was ever downgraded throughout the whole financial crisis. Webster Bank among banks its size I think had an above average CFO and he literally buried people with information. He was going to make Webster the most transparent size of its size and he put a lot of stuff on the website and I think he did not turn down the rating agencies. And you answer me this, how does a stock go from 57 in 2007 to 3 in March of 2009? And the credit rating of the unsecured debt does not change? But it did not, maybe it went down a notch, it went down from BBB to BBB-, but that is the wild and whacky world of rating agencies. And they will tell you that the reason they do that, the reason they are slow to mark stuff down is they have a philosophical view of what the long term risks of the business or the industry really are. They really are traitors; they are not in the business to say whether a bond is worth 80 or 85. That is not what they claim to do that all. What they claim to do is an independent judgment of expected loss, and some people think they are good at it. And in fact if you look after the crisis, what you find is that rating agencies have a very mixed record. In some segments of what they do, they are actually very good. And they were actually very good long before the crisis, in the middle of the crisis and after the crisis. What they do is very respectable. And you look at other segments of their business, and it is just criminal – I do not have another word for it. And those two records now sit side by side. That earlier record of Moody's and Standard & Poor's for municipal bonds and municipal agencies – a very good record. The earlier record for AAA operating corporates with real people who do real things and produce real products is a very good record. Where the record goes very dicey is in structured finance which started in the 70s and just grew and grew and grew and clearly there as kind of a speculative bluff where people were just in love with whatever structure the US showed up with. With is interesting is that some people bought

it and some people did not. I think it is safe to say that to my mind I think that probably the biggest goof that I know of is RBS, I do not think any bank got hit so hard, and has been so slow to comeback. Of the American banks the weakest is clearly Citibank. But in China they bought nearly none of this stuff. They tried to sell this stuff to the Australians and the bankers in Singapore and they just looked at them funny. Canada has a reputation of a very boring place and President Obama went up there and complimented them on their financial system because they have 3, 4 or 5 very big banks and none of them touched this stuff. So some people could be sold and some could not.

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

Certainly if I was an issuer, and I wanted to influence a rating agency, that is certainly the kind of stuff I could talk about. I am not sure I would do it in a formal meeting, there are some conversations you have in formal meetings, some conversations you have in hallways, some conversations you have in the urinal in the bathroom, some conversations you have in restaurants and some conversations you have at the 16<sup>th</sup> hole of the golf course where even if someone has got a very fine tune microphone, it is probably too far away to pick up what you are saying. if you think the people who play this game are not smart enough to do that stuff, again you underestimate just how thorough they are and just how smart they are. There are all sorts of different places for all kinds of conversations and like any other serious profession, having the right sort of conversation in the right place is half your job.

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

Previously answered.

**20. How would you describe your relationship with rating agencies?**

One of the legendary CEOs of Bear Stearns long before it fell apart said if you want a friend on Wall Street buy a dog. There is no such thing as friendship on Wall Street, it does not exist.

**21. What is your impression on notching?**

You have a problem with notching and unsolicited ratings in America because we have this thing called freedom of speech, and that includes the right of financial publishers to publish just like a newspaper. So notching and unsolicited rating is very hard to manage in America. This is really hard to control because people are entitled to have opinions and they are entitled to publish them. 8 or 9 times out of 10 Moody's and Standard & Poor's can be substituted for each other. The difference in ratings is very small and what you want to see is Standard & Poor's that was paid to rate a bond in year 1 and then in year 3 or year 5 Moody's rated it without being paid or Moody's rated it and was paid, and they came to a materially different conclusion than Standard & Poor's came to. So that is something I think would be quantifiable. The other thing I think in my personal experience is that unsolicited ratings are real, that is a threat that a rating agency can use. It has been done, and I am not sure what you can do about it at least in America. There are people who are too cheap to pay rating agencies and one of our biggest clients in ING was one of them and he got slapped with the

unsolicited rating and I had to spend two months saying that our security exposure to this client was either the best BB+ you had ever seen in your life or it was some kind of weak BBB. And I spent about 6 weeks or 2 months proving that beyond reasonable doubt. And one of the agencies, I forget which one, decided that an unsolicited rating for the exact same company was B3. So absolutely miles and limes apart in risk measurement terms. So unsolicited ratings are real, how often it goes on now I do not know but certainly there is a history. The party that was being abused was our client, who we were lending to, and it is a matter of public record that XXXX XXXX [name is unclear] was a client of ING at that time, we lent him a whole bunch of money and we did as much as anybody to help him make his first billion, I think he is up to about 30 billion now. And he is just tough as nails, he really is, and he is really cheap. I am sure the rating agencies approached him and said his vehicles should be rated and it was a good idea, and he did not want to spend \$10 – 20,000 to get a rating so he said no. So they just basically threw one out there because he would not pay them. It is very clear that they could be spiteful that way but it is pretty clear when they do it and pretty clear who they do it to. You know when Fitch picks one Korean company out of 50 and gives it a B rating, there is always a reason why it is that one company, so you look for patterns in this kind of stuff and they are there, they are usually reasons, probably hard to find and not worth your time to find, but there are usually reasons. I do not know for certain that he was approached before he got the unsolicited rating. I was not in the room; I was not listening to the phone call when that happened, absolutely not. Manhattan is not a very big place, just like the financial centre of London. It really is not that big and people do get to know each other after 2 or 3 years, so it is impossible in my mind that the subject never came up. If somebody slaps an unfair rating on you, you would always do any future rating business with the other two, that is just a declaration of war, it really is. It is somebody trying to hurt you on purpose. They are trying to make you borrow money at a higher rate than you should, on purpose. They are trying to financially damage you on purpose and the reason they are doing it is because they want to get paid. And I do not understand it any other way so the unsolicited rating part is just a questionable practice and like I said statistical rating agencies are almost like newspapers. There is a freedom of speech issue in what they do and there is no question that provide a tremendous amount of information and analysis to the country in general for free.

## **22. What is your impression on tying?**

I happen to know as a banker that if I am working for a bank and I tie a loan to some other service that is a crime, I would go to jail for doing that. I would be surprised if that is not true for the rating agencies as well. They might be exempt from that but they probably are not now. So you would want to make sure that tying is currently legal for Moody's, Standard & Poor's and Fitch. My guess is that it is not, I am not a Securities Lawyer, but certainly if it is legal it should not be. The problem is when there are three rating agencies and Goldman Sachs or Morgan Stanley only need two of them to take a bond to the market, they always can play odd man out. If the rating agency puts up a fight, they would say fine, we would swap you out for Fitch, they charge less anyway. And if you are going to be a pain in the ass about

it we are not only going to do it with this deal we would do it with the next 20 deals that are just like it. And what do you do when you are Standard & Poor's, would you say you wanted to give up the next 20 deals or do I want to sign this deal. The issuers and the financial institutions are the one who might instigate tying in this way. It is never done in writing, you will never see that writing, but if you think that is not said...and it could even be more diplomatically alluded to without being said. They could just say 'you know it is just getting too difficult to work with you guys on these things, we have got a solution, we have got customers to serve, we need to make some money, you are tying up our bankers, we bankers get paid a lot if we have to do 20 extra hours to make you happy everybody loses his money. There are fifty ways for a senior banker at any one of the important firms to talk to a rating agency, and more or less threaten them without doing anything illegal. There are at least 50 ways to send that message, at least 50.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

Previously answered.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

You are the senior manager of a really big bond fund, say somebody like Bill Gross, he just left Pacific Investment Management. He founded and ran the biggest bond fund in the world for 20 or 30 years. If him or somebody like him says I would not buy a bond without a rating, you have to think through the situation from their side. Why do they have that preference after they have been so completely burned? Why do they still have that preference? And it is an interesting question, I am not a billionaire bond fund manager, but I would guess that it comes down to some factors. There is a salesman from the securities company that is selling the bonds, how much do you trust him, how much do you believe him? There is a team of people who worked on the deal bringing it to market. How much do you trust them, how much are you willing to risk based on what they say, then how much information is publicly disclosed? If you wanted to get your hands on everything, you could probably get that and analyse it yourself. How much information is that? And what would it cost to get somebody with their heads screwed on straight to read through that and give you a real opinion? Then you have the choice of at no cost to you, you can have a rating agency, which has full discretion to negotiate any kind of information agreement they want, and they are going to put a risk grade on this bond. Those would be the three factors because in America there is such thing as a private placement. And they are bought mostly by insurance companies, and they are very good because they insurance companies do not want to pay for the ratings, but the insurance companies in America are regulated at the state level. And there is a national association of state regulators that ensures common principles cross state lines. So you do not get widely different rules from New York to Connecticut. This has existed for a long time and insurance company buyers of credit are considered to be grown-ups and they do not need either credit rating agency if they do not want one. And then they would offer a blank paper without it but overall it meets their criteria of what credit quality is and oddly enough the problems of

insurance companies in America – if you take AIG out of the picture, are pretty minor compared to the problems with banks. So where there is a culture of being able to judge this stuff for yourself I think AIG is a special animal but if you look at the other 5,000 or 10,000 insurance companies in America, their records are much better than the banks.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

Previously answered.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

Previously answered.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

I am not sure about notching, but tying certainly could be because when you tie you can rate a security for a bargain basement price and then make all your money from both pieces of work, on the other thing that you have tied the business to. So then Standard & Poor's and Moody's could make the required profit for doing both jobs but a new competitor that rates securities and only rates securities would be competing at a clear disadvantage because they would have to compete against Moody's bargain price because they could not compete with the second service that was tied. So that is very clear to me. Notching I am not quite so sure about.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

The most crucial point to reforming the big three credit rating agencies and creating a more level playing field for fixed income investors is to require issuers to make public every single piece of information they provide to the rating agencies (**response 28 was sent by email**).

## Respondent I

### Transcript for Issuer

#### 1. Background and experience

I started out with Standard Chartered in Pakistan in 1998, and it feels like yesterday. From there I moved to ABN AMRO after 2 years and returned to Standard Chartered as a relationship Manager in 2001 but this time based in Dubai. And then in 2005 I got the chance to move to London to work in the wholesale team. Since then I have been dealing with structured and project finance and I am now the regional head for the Middle East and Africa working out from our head office in London.

#### 2. Education

MBA, Institute of Business Administration

#### 3. Job Title

Regional Head Structured Export Finance at Standard Chartered

#### 4. Projects Involved In

Structured Finance, Investment Banking, Credit Risk, Credit Analysis

#### 5. Securities Dealt With

CMBS, CBOs and CDOs

#### 6. Impression on Competition in CRA Industry

There is a small number of recognised participants. I think of Moody's, Fitch and Standard and Poor's, I cannot list any more firms that have achieved similar recognition to them. Personally I asked myself why this was the case but it was all very clear to me when I completed my CFA courses that these guys have the best tools for the job, relatively. They also have a good brand name for structured, corporate and even sovereign ratings altogether and in the end all financial institutions in these brackets intersect with each other so these agencies have become a part of that intersection.

#### 7. Is the CRA industry dominated by a few players?

It certainly is. Fitch, Standards and Poor's and Moody's have a very wide coverage of financial services bar insurance where AM Best has a strong reputation. I think the main thing is that the other credit rating agencies do not provide ratings for all types of instruments like Fitch, Standard and Poor's and Moody's do. The unique thing about them is that unlike competitors in other places, they have similar processes, they all use ordinal scales and have a comparable record of ratings performance. All these things combine to create a good market perception in their favour.

#### 8. Would you like to see new CRAs in the market?

I think there has always been a flow of new CRAs coming into the market, but they have not upstaged the big three. In some cases, they have been folded into one of the big three. I think the fundamental issue is whether there is a gap in the market that a new CRA can spot and immediately fill. None has emerged so far but when it does, they will have to be faster than the big three or else it will be another opportunity forgone. If my memory serves me well, Fitch



became one of the big three when securitisation finance was growing rapidly so they had a break and took full advantage of it.

**9. How would you select CRAs to rate your bonds?**

I have had different experiences so I will just focus on my current role in structured export finance. I support clients that want funding to sell to various overseas markets, pardon me that I cannot name any of my clients or what they do. You know there are many risks involved in exporting commodities, financial and otherwise, so we support our clients to design a structure that mitigates unique risks for their export operations. So, when a client visits my team and we conduct our diligence of their operations, we apply to the agency with the best coverage in the area, this is the first criteria. Or, we apply to the agency that the exporter or potential investors have chosen. You can only know by tacit knowledge on the spot which agency to apply to. In pure structured finance, we need two ratings for certain deals, but in export finance we only need one but if we have multiple interests from interested parties then we can apply to up to three agencies.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

I would make this request for a structured instrument but not for export finance. For a structured instrument, the arrangement comprises various assets with conflicting values and risk potentials so I would like to get them rated individually to judge if they can function alongside each other in the structure. It is like a test run or a test of the compatibility of the instruments.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Essentially secured bonds have collaterals and unsecured bonds have no collateral from an analyst's perspective. From an investor's perspective, an unsecured bond with a lower rating commands a higher yield. So to answer your question, all things being equal, we would receive higher ratings for secured instruments and lower ratings for unsecured instruments due to the presence and absence of collateral. In addition to these, the rating agencies have an assumed recovery rate for modelling the cash flows of secured and unsecured. The assumed recovery rate is a standard percentage and it could be anything between 40% to 60%.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

Yes, again all things being equal. Subordinate tranches will usually yield lower ratings when compared to senior tranches. In fact, the most subordinate of tranches may not be rated at all. The issuers set out to obtain investment grade ratings for senior tranches and non-investment grades for the junior ones, it is risky of course but investors will take a chance because of the high yield of the junior tranches or the first loss piece as they are called. The arrangement of tranches as you know is for loss allocation to be done bottom-up in the event of default. But what you must remember is that senior and subordinate tranches share certain properties and

this is why investors still find the junior tranches attractive because there is confidence in the whole structure.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

I had this situation in structured finance and it was tricky so we preferred to err on the side of caution by referring clients to the Basel II requirement for internal risk assessment as opposed to counterpart assessments. After conducting our internal checks, we only use the rating agencies to confirm the risk level; it is just a further confirmation that the investors like to have at the end of the day. However, I still like to see counterpart ratings from any of the big three because as an analyst it provides a basis to begin my analysis from, this is always helpful. I am not in favour of maintaining counterpart ratings even though I am obliged to pass them on to a second rating agency. The alarm bells will go off if I stripped the ratings just because the instruments were getting re-rated.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

After our internal assessment, whether in structured or export finance, we will submit a document to the rating agency that we have chosen. After this, they will arrange a meeting with us at their offices or at ours. In some cases, the meetings are arranged at the issuers' facility to inspect their operations or the commodity. The meetings can last for hours or even a few days depending on the complexity of the structure and the information that all parties have available. Sometimes the structure collapses at this stage especially if it fails relevant legal tests and cash flow tests. If it passes through without problems, the agencies will go off and decide a rating at an agreed date and let us know with the option to accept or to appeal. In my view I like the issuers to be present at all meetings because their expectations can then be managed and they can already get a sense of the ratings, roughly.

**15. Tell me about the exit rating clause in rating contracts?**

The motive behind the clause is to make sure that we inform stakeholders of the credit situation at every stage of our oversight, including the end point when we receive a notice to stop providing ratings. Without exit ratings we cannot offer complete diligence to the public.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

Not to ourselves as financiers, but to the issuers I know that the agencies provide some information desk services to guide their behaviour in the market. Some of the examples I can think of are new market entries, corporate restructures, consolidations and acquisitions, issuers want to know what effect these would have on their long term ratings so they have direct conversations with the agencies about these. Besides being rating agencies, they are treasure-troves for industry research on various sectors so everyone has a second reason to contact them.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

I would think the issuers will initiate the dealings if they were seeking important information.

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

Again, perhaps the issuers do without our knowledge.

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

It would depend on a need arising to mention it during the rating process or not. In export finance there is the issue of sustainability so we do look at the long term and how the operation can continue to provide cash to reward investors. Some re-issues are planned well in advance and will need to be mentioned to assess its fit with the current issue

**20. How would you describe your relationship with rating agencies?**

It is a well-managed and transparent relationship and I have learnt a lot from their analysis over the years as some of their practices have influenced our diligence at Standard Chartered. I have a permanent contact team and they always offer a friendly service and come back to check with me if things went well after every rating. I always tell them 'no' just to wind them up, just a little fun.

**21. What is your impression on notching?**

Notching represents recovery rates. Senior tranches get notched up and junior tranches get notched down. I know that controversy has been created by this in the past as it looks like an automatic downgrade because Moody's and S&P will lower ratings by up to three or more notches if they are in a pool and have not been rated before. You could understand the controversy. My take on the issue is that the instruments should be rated to determine a rating instead of automatically assuming a lower rating. But that's too much work for the agencies so they have a standard procedure which they say is in the interest of investors.

**22. What is your impression on tying?**

Tying is the consequence of market expectation and regulation. Nearly all international regulations are similar in requesting ratings from agencies of a particular profile and that profile suggests Moody's, S&P and Fitch whichever way you look at it. One of the characteristics of the rating industry is the faith placed in it by regulation. So I would not classify this as commercial tying that amounts to abusing market power. I think it is more like regulatory tying.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

Do not be deceived, ratings over time have a record of good performance even though they have failed in some cases – those cases are the exception. I think that ratings are informative in letting us know high risk from low risk. When ratings do not perform there have been evidence of internal misconduct and transgressions within the company or in the sector. This is not a defence for rating agencies because I think they too can improve the responsiveness of their ratings by being more proactive. So I think that rating requests will remain high as long as their track record is maintained.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

It is still early days in structured finance, the types of instruments that can still be developed in an endless list. In fact, every structured arrangement is a new type of instrument that can be standardised and offered to clients in the same line of business and this is what we try to do. We develop solutions and standardise them for our clients to achieve their own objectives. As for market discipline, it is something that is incremental. I can see that investors are now asking for more and more information and pressing for financiers like ourselves to conduct internal due diligence. For me market discipline is about how much power investors exert and how much that power can affect prices and that is certainly what I have observed, increasingly.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

Investors study the liabilities of the issuer to make a decision whether to invest. The basic information that they want is prepayment risk, interest rate and principal payment allocation and we, the financiers, provide them with this information. Most of the information on issuers is publicly available so I also encourage investors to find out what is out there including the reputation of the issuer so they can decide whether to invest. The decision lies with them but they also have their own incentives to make good returns.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

It is a delicate situation to be honest. Before the crunch it was certainly so, a lot of self-regulation was taking place but not since then. Europe has responded strongly by flooding the market with various directives after being perceived to be reliant on American rules. It has changed very much.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

Tying enforced by regulation limits free choice. I think that the demanded CRA profile for rating certain types of instruments profits some agencies to the disadvantage of others but I cannot say if that's all negative or not. I believe that notching allows CRAs to exercise more power as well.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

I will not entrust the state with that responsibility. What the state should intervene for is the abuse of market power where it is evidenced as they should do in any market really. I think that the new agencies need to broaden their rating to provide options for issues. My suggestion is mergers among themselves to increase their presence and unite their systems to form a formidable force just as Fitch did.

## Respondent J

### Transcript for Issuer

**1. Background and experience**

(Unwilling to disclose)

**2. Education**

MBA, University of Hertfordshire

**3. Job Title**

Vice President- Project and Structured Finance, ABC International Bank

**4. Projects Involved In**

Structured Investment Products, Derivatives, Asset & Portfolio Management, Marketable Securities & Fixed Income Proprietary Investments

**5. Securities Dealt With**

I am an expert in oil and gas project finance.

**6. Impression on Competition in CRA Industry**

I have not been in a position to monitor competition in the rating industry. As a banker, my job is to liaise with the agencies that my borrowers and investors require. By default they have always required Moody's or Standard and Poor's, the times I have gone with Fitch are rare, it seldom happens. For most deals we underwrite with two ratings from Moody's and Standard and Poor's. I have heard of other upcoming rating agencies but not on the job, just in following the news as I am interested in all things finance.

**7. Is the CRA industry dominated by a few players?**

It would appear that Moody's and Standard and Poor's are the dominant players. I am sure Fitch has an appeal with some people in the business but I cannot testify for them. Moody's and Standard and Poor's are definitely the big boys on our block, and it is fair to say we do not mess with them.

**8. Would you like to see new CRAs in the market?**

I do not have a personal take on the issue quite frankly. I would only say yes if our borrowers and investors come in and demand ratings from agencies other than Moody's, Standard and Poor's and Fitch. Then, I would like to see new CRAs that can provide the needed service. This is just a scenario that I think is farfetched to be honest.

**9. How would you select CRAs to rate your bonds?**

It depends on a few factors but they are all straightforward. The specific request of the borrowers or investors is the biggest factor. They are the ones who need the money and pay the money, we are just negotiators who connect both sides so we commission the rating agency that they want without any fuss. Another factor is our relationship with the rating agencies, time is money, so we like to deal with people we have dealt with in the past because we understand each other, the process is quicker because of trust and it makes all our lives easier at no extra cost. Having said that, the analysts are shuffled around quite quickly these days. One, two or three deals if you are fortunate and they are off to another team, maybe even another job. As you know, often times the borrowers and the investors

have different choices and that's why we end up with the two big boys. Or sometimes they both want either so we still end up with the big boys.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

Yes, there are situations where we need different ratings but it is all for a valid reason. We are talking about a pool, some loans are backed by assets and cash flow and some are not. Some loans are backed by even more superior assets than others. Again it depends on the request of the borrowers and investors and the individual tranches we are trying to sell. Once the distinctions are established we request the ratings for the individual bonds we need. Sometimes the number of bonds we want rated depends on the stage of the project being financed. At the early stage you want everything rated, but when you refinance after the project has progressed or is completed then you do not need to rate the whole pool. I think that the rating agencies consider the overall performance of the project or the structure before choosing to comply or not to comply. In my experience if a good cash flow is evident then they generally listen to us and rate just what we ask them to.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Yes, absolutely. You cannot have the same ratings for bonds with different probabilities of default. The depositors will not be comfortable with that.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

Just like my previous answer, the ratings have to reflect the default probability. If the risk is higher for subordinate tranches then we receive inferior ratings to senior tranches, it really is as simple as that.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

Yes, especially in a refinancing situation. Investors may recognise existing ratings but if they were issued 2 or 3 years ago the environment would have changed a lot. You may also have new investors who want Standard and Poor's and not Moody's, the counterpart ratings then become a part of the information you transfer to Standard and Poor's to show the credit history of the bond. Remember that in project and structured finance you are talking about 10 years or more maturity period, over such a long time of financing and refinancing you are likely to secure multiple ratings for the bonds.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

The starting point of a rating process depends on whether it is a project or structured finance. For a project finance, we get approached by the borrowing firm and then we analyse the business plan. If it makes sense to us we may consider providing the funds to them as a bank but because we get stretched ourselves there are times when we cannot. In this situation we help the borrowers to find investors who want to make an interest on the capital they lend and all these parties require credit ratings by law or just for their own peace of mind. At this point

we invite the rating agencies, brief them and get a rating eventually. There could be some going back and forth by my team and the analysts in the agency which is needed for clarity and information exchange. You never know from the start exactly how much information is needed in the initial briefing because every deal is different and all parties have to respond to the differences to get the most accurate rating. For structured finance we know from the onset that we are going to issue bonds especially when the capital is too huge to be raised by private investors alone. We try to signal to the rating agencies in time while the deal is still being arranged so that they can help us monitor the structure and prompt us on rating implications early enough. This too may involve going back and forth until we obtain a rating. Whether it is project or structured finance, what we try to do is to communicate with the agencies all the time so that they know what we are up to and are in the picture. We do not want unnecessary delays if they have to play catch up with us.

**15. Tell me about the exit rating clause in rating contracts?**

Previously the exit rating clause was only used in corporate rating contracts, but over time the rating agencies introduced it to project and structured ratings. The clause still divides opinion as there are those who think it is the rating agencies' way of maximising rating fees from issuers, and others who think it helps steady surveillance. For me it goes both ways, the rating agencies are in this to be profitable and there's no doubt about that, and steady surveillance means more money for them because somebody has to pay for it. The clause itself does not affect business for new CRAs in our own case because we only do business with the big three and they all use the exit clause routinely.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

With Standard and Poor's, we only pay for ratings but with Moody's we value their staff training service as well as their valuation service. We like to improve our internal competencies so it is a good thing Moody's can provide these services to train our staff and keep us aware of valuation techniques so we provide more value to our customers. You must remember that our customers have choices and can go to other banks. We do not want that so we need to have the means to offer superior service. Most of the projects we underwrite are in the Middle East so we have an edge there, but we still need training on best practices in London.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

It is a bit of both. We have our HR department to review what training we need and so Moody's along with other trainers provide this. As for valuation, we easily find out any further intelligence we in the rating negotiation process for deal structuring and if Moody's offer such intelligence we are happy to pay for it. Our ultimate goal is to have the tools to serve our borrowers and investors. It is not a case of analysts telling us 'oh, we have this service and you should buy it, no...'. It is a case of 'did you not know this?' and that way they let us know where to get help. We also figure out for ourselves what we need to learn and like I said if Moody's can advise or train us we go for it, if they can't we go elsewhere, it does not matter.

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

It is not consultancy per se, I would say we ask and we receive advisory service all year round in the same way that you would have a regular medical check-up. If your health is failing you want to know in time, therefore if our projects are not performing we want to know in time and take the necessary measures. Our clients want to see that we make an effort, and credit ratings are the first indicators that they check so we have to be careful.

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

No, we never know about our future financing so we cannot let the agencies know. We may only advise them of some refinancing that is due within a pool of securities presented for ratings but that is as far as it gets because it is as far as we know ourselves. I do not think it is possible to disclose this even if we know because the request may be for one agency and not the other. You do not want to stand them up.

**20. How would you describe your relationship with rating agencies?**

It is a good relationship, professional at the least. Of course I have my preference from analyst to analyst and from deal to deal but generally speaking we both achieve our objectives without significant misunderstanding. When I say I have my preference it is not about receiving favours from one and not the other. It is just about having a better understanding with some analysts on some deals than you would with others. With some analysts you feel from the start of negotiation that you are on the same page, that they understand you and you understand them. With other analysts it takes a while to click, I suppose it is the same when you go to your regular Tesco, you have your favourite person behind the till but if she's not there today it does not make your shopping a bad experience.

**21. What is your impression on notching?**

We frequently have a variance between ratings from Moody's and Standard and Poor's. A few times we have been fortunate to obtain corresponding ratings on particular deals. We have never gone to the extent of crying foul for being notched because the individual ratings are still high up in the investment grade so there is no need to. But on the rare occasions where we have adjudged the variance to be significant to our investors we have spoken to the agency for the lower rating to reconsider. We re-present information, and when needed we rejig the structure to correct any limiting concerns as you would. The purpose is not to obtain the highest possible rating, it is just to reduce the significance of the variance and once we have done this we may even be rated higher than the other rating, this actually happens quite a lot. On top of that, we deal with both Moody's and Standard and Poor's on a consistent basis anyway so it would not be in their long term interest to notch us even if they wanted to.

**22. What is your impression on tying?**

If there is pressure to continuously deal with Moody's and Standard and Poor's it comes from us, and the pressure from us in turn comes from our investors. You may say we are tied to the two agencies but then I am also tied to my local Tesco like I told you before, even though I



know where Asda and Aldi are. I have never received a direct request from Moody's and Standard and Poor's to come back next time, except if they do it covertly.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

I can only speak for oil and gas and the projects I finance. Ratings in this area perform quite well I think, except for volatilities that take all of us by surprise, but then they also take our investors by surprise so we all have to react sensibly. You know about the falling oil prices but most of our deals are hedged anyway, but if it goes on for too long I think we can all understand if the ratings fall, or why they were high in the first place. \$105 per barrel to \$50 per barrel is too big a change to blame rating agencies for, and our investors know that and they are able to analyse the situation sensibly. More damaging than falling prices is terrorism of the sort that we had on oil installations in Algeria. Things like that affect production and cash flow from our assets, you may be insured against terrorists but you cannot hedge against them.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

For me maturity depends on how much you understand the market. I know how it works, we make good deals, our borrowers and investors come out happy because we do things that work. You must realise that project finance has been happening since the early 1900s, maybe it got bigger in the last 20 years but for me and my team, with our experience, we think the sector is mature. Those who do not understand what we do would say we are in the early stages, and maybe immature to structure deals and projects that nobody understands. I can assure you that we understand, the investors understand, and the rating agencies also understand. The general public do not understand because it is not their bread and butter or their professional interest. If they fancy my job they will know it all. We are a mature sector.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

You cannot call yourself a participant if you do not have information. A participant is somebody with a particular interest in structured finance whether as an underwriter, a borrower or an investor. If you do not have enough information you do not become a participant here, you do not make any deals, and maybe you should not comment on any deals as well. But, maybe I am a bit biased because in other sectors you may be a participant by deputation. Let us say you make pension contributions for example, the pension company invests on your behalf but I think if you are curious enough the pension company will provide information to you on how your contribution is being invested. It is a fundamental right I think, but I don't know the rules regarding this.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

I think you have to examine every sector and analyse their merits. If you are talking about the last crisis and the RMBS market, then the government relied too much on market participants. But, if you are talking about oil and gas projects and the use of special purpose entities

(SPEs), the government has not got much to worry about. The RMBS thing went out of hand, too many loans were given to people who were not even old enough to own houses. The government has a responsibility when so many houses are being repossessed, that is the role of the government, to protect the populace. But in project finance, you cannot pretend to be able build and operate an oil and gas plant, you get found out the very second you suggest it. The RMBS market should have been checked, there were definitely lapses there but I will not blame the government all the way.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

This is very hypothetical but I'll say yes in any sector. If you get blackmailed and forced to buy from only one seller whatever the price then there is no free choice. Again, this is only hypothetical.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

Generally speaking, I think the state begins to complicate things when they intervene in any industry. We have a small number of rating agencies doing a difficult task but doing it anyway. I know that there is a big suggestion since the financial crisis to have more rating agencies but I think it is time for perspective and everybody including the state to learn from mistakes, and not necessarily a time for beginners to dominate the market. We may risk accurate ratings unless these new agencies can prove themselves from day one but it takes time as we all know. I love to see businesses grow, any kind of business, I love progress but not progress that comes from being spoon-fed because it will not last. If a new agency comes around over 3 years, 10 years or 15 years to compete with Moody's and Standard and Poor's shoulder to shoulder I will clap for them and say well done you deserve it. However, I do not see how a government baby can grow so quickly.

## Respondent K

### Transcript for Issuer

**1. Background and experience**

I have worked at HSBC for 3 years. Before then, I worked in the Bank of Ireland and ING. I have been in this industry for 10 years

**2. Education**

MSc. Finance, Loughborough University

**3. Job Title**

Associate Director of Project Finance

**4. Projects Involved In**

Project finance, debt finance, corporate finance and asset-based lending

**5. Securities Dealt With**

ABS

**6. Impression on Competition in CRA Industry**

I have noticed some new companies offering competitive products to Moody's, Standards and Poor's and Fitch. Their ratings look to be just as reliable as the aforementioned; the problem is whether they offer anything different. It is not yet obvious.

**7. Is the CRA industry dominated by a few players?**

It was definitely dominated by the 3 I already mentioned looking back 3 years and beyond. But recently I think the new companies are winning market share little by little.

**8. Would you like to see new CRAs in the market?**

My job is easy if all CRAs follow the same standards, methodology and rating scale. It does not matter how many they are in the market; we market participants just do not want to be confused by too many systems.

**9. How would you select CRAs to rate your bonds?**

For us, it is important that the CRA or CRAs as the case may be satisfy the requirement of all stakeholders in a project. I am talking about sponsors, lenders, regulators and even legislators. There might be a default legal requirement for 2 CRAs so we are automated to contract 2 CRAs straightaway. However, the selection becomes clearer when we determine the special interests of all the stakeholders, expertise and a prior relationship between the CRA(s) and any of the stakeholders is frequently a criterion for selecting CRAs.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

I will answer this in the perspective of project finance. We often have different classes of assets relative to the level of risks investors are prepared to take. Normally, the bigger the risk the bigger the pay-out, that is how project finance and finance generally works. So low level assets have low risks and high level assets carry high risks. Even so, there are many levels of low and high risks so you have a spectrum of risks and assets in a typical deal. Because of these distinctions, we select CRAs by thinking of the lenders we want to entice and the CRAs that they will recognise. We also think of the CRAs who have rated the assets before

especially in cases of projects being refinanced. In the end you end up with 2 or 3 CRAs for every deal. These would be 2 or all three of Moody's, Standards and Poor's and Fitch in the projects we underwrite in my team.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Yes, and we expect that. The ratings have got to be different for projects with and without collateral. We have some unsecured projects because there is an obvious demand for the infrastructure being financed, we can safely look down the eye of the barrel and see the cash flow to be derived. There is no need to secure a much needed highway project that will open up a country in Africa or Asia, or a power utility project or even a rail project. These are commodities with obvious repayment from the public.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

No, tranches become senior and subordinate for a reason as far as I know, so ratings have to be dissimilar for those same reasons. Most of the time the reason could be cash flow, expected maturity, political or economic environment or other subjective reasons.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

Yes, we do this for projects to be refinanced by us. We will do this freely anyway, but it is part of the information required so that the new CRA can assess the risk level and history.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

When my team gets approached by a sponsor of a project, together we will evaluate their proposal to see if it makes any sense. If it is sensible then we will also evaluate any assets, the special purpose vehicle (SPV) and all the stakeholders to select the CRAs. We will consider any previous ratings given to these assets and stakeholders. Once we put our figures together, we will present these and the projection to selected CRAs and arrange a meeting with them. It could be any number of meetings called by either side. Projects change a lot, it takes time to gather and transfer all the information needed on sponsors, procurers, contractors, suppliers and ultimately lenders. One meeting is not enough and I personally prefer to go back and forth to ensure that the deal is solidly struck and all parties have the required information. You will have to be a clairvoyant to present all the required information in the first meeting because no project is the same. Sometimes we simply do not have particular information because it is a provision nobody could foresee. Then we go back to the drawing board with the sponsors, make the provision and provide the information to the rating agency. This is what it takes to provide a good underwriting service.

**15. Tell me about the exit rating clause in rating contracts?**

The clause is there to make sure that issuers do not terminate rating contracts when things are not going as well as planned. When things are bad some issuers might want to avoid providing information to investors by removing ratings so Standard and Poor's in particular

designed this clause to block issuers from taking the easy way out. But I think in the long run it helps to keep investors informed and that is vital.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

HSBC and its many subsidiaries receive corporate ratings from CRAs, we need that as well to maintain our reputation. We have received so many awards in the project finance team from Euromoney, EMEA Finance and The Banker. I think favourable corporate ratings from Fitch, Standards and Poor's and Moody's have helped our global recognition even though we have had a few downgrades of our own.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

Corporate ratings are initiated by us but I do not know for sure, it happens above me.

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

If HSBC does, it is not in the project finance team. We only demand and receive ratings.

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

We have no formalised process on this. We may make reference to proposals currently being evaluated with sponsors as part of any conversation. A lot of things arise when you meet rating analysts again and again, you make references to many things but at the end of the day every project has its time to be underwritten and to be rated. When that time comes we treat every project prudently.

**20. How would you describe your relationship with rating agencies?**

It is just ok. We get along well and have no special interest. It is just project after project and ratings after ratings, so we both get on with it. The rating analysts get shuffled around regularly but the new guys are usually experienced so we have a good basis to continue our business dealings. Really, at the end of the day it is HSBC and Moody and Fitch talking, and not Investment Banker and Rating Analyst. We are agents for a specific period and the organisational relationship looks to be a firmly professional one to me.

**21. What is your impression on notching?**

I hear all the noise about nothing. It could mean other things in other circles but in project finance it is simply obtaining different ratings for different asset classes with different risks, and I am comfortable with that. In fact, it is the alternative that I would be uncomfortable with. I do not have first-hand experience of being notched down or downgraded because we selected one CRA over another so I cannot comment further. I think we are immune from that in project finance.

**22. What is your impression on tying?**

You have to be a good judge of intentions to prove intended tying. My impression is that we are tied to Moody's, Standards and Poor's and Fitch because they understand our books better than other rating agencies. Also, they are the best fit for us when we make a decision on the needed rating expertise, experience and the interest of our stakeholders for virtually all

project finance. We have no intention and interest in helping the CRAs to grow their market shares or to stop new entrants in their own space. On the other hand, if CRAs get greedy and demand that we pay for their ratings and other services at the same time then we will have a problem because it is wrong and unlawful. I will be a good judge of that intention and flag it up. I know that in the United States they have had anti-tying laws for many decades.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

Project finance is a little different because here we are talking about projects with evident cash flow which makes poor performance remote. Some structured securities like RMBS or CDOs might be different because their cash flows are less evident and speculation does not always match performance. Therefore, ratings have performed very well in project finance as a matter of fact. Moody's had a publication a couple of years ago that showed that out of over 2,600 project finance rated by them, only around 210 defaulted. I think that is remarkable.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

Project finance is a mature sector; more than people realise. Since the 1970s if not earlier, governments have turned to project finance in nearly every corner for power generation, water, transportation, oil, mining etc. When projects collapse you will find people shouting indiscipline but you need an inside view on these things. Think of the Arab Spring for example and the number of capital projects affected by the crisis. These are external factors beyond the control of most people so it is not right to say project finance is immature and its participants are indisciplined with any situational analysis. I will only say that there is more scope for project finance to develop and become even more common and that simply because every country has got a shortage of infrastructure or the need to upgrade them.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

You cannot be in project finance without enough information. Some information might be up in the air the first time or at the start of the project proposal but not beyond that. We are talking about government expenditure and tax payers' money for the majority of these projects so everyone is informed, not least the public if the project is of actual utility to them. Besides the financial information we provide, you also have pressure groups, political groups and environment groups that are ready to blow their whistles at every opportunity. With wide interest and public scrutiny, you end up with abundant financial and non-financial information. The problem is whether or not it is of interest to a person.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

It is a different scenario when the regulator is in the picture of the capital project because accountability becomes even more necessary. In this scenario the government relies on itself and its agencies to tick all boxes correctly. For other asset backed securities it could be different because it is private sponsors dealing with private lenders. I am sure they also tick

the boxes correctly but without the government in the picture the initiative for market discipline is less imperative I would imagine. I am just speculating here; I do not know for certain.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

This is another speculation. The principle of notching and tying like you described it sounds restrictive. It will frustrate all of us in the market and check competition, most certainly. I know of real cases of trying in the electronics market, you need to prove it beyond doubt in the financial services.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

I think the government was ruffled when CRAs downgraded them and they are hitting back with fines and new regulations. Some of the regulations are about new companies coming into the space to be fully registered rating agencies. There is no obvious reason why any type of enterprise should be suppressed. At the same time, there is no reason why this industry should be protected from new entrants. My feeling and wish is that we still have the same recognisable systems and standards no matter how many rating agencies we have in the future. It is the role of the government to ensure that this is the case. It will also be to their benefit that the systems are consistent.

## Respondent L

### Transcript for Issuer

#### 1. Background and experience

My banking career started in 2005 at the Bank of Scotland where I was an analyst for leverage Finance. After about 3 years I moved o structured finance at the Bank and then I took a chance at Clydesdale Bank in London to be Associate Director of both Corporate and Structured Finance. After two years I got head hunted to join Barclays to do the same role until I joined HSBC in 2014. I am now focused on leverage and structured finance.

#### 2. Education

BA, University of Newcastle-Upon-Tyne

#### 3. Job Title

Director of Leverage and Structured Finance

#### 4. Projects Involved In

Loan restructuring, leverage finance origination

#### 5. Securities Dealt With

The whole lot - CDOs, MBS, MBOs, you name them.

#### 6. Impression on Competition in CRA Industry

Competition is a delicate discussion in this area because it is logical to have more agencies but at the same time you want to guarantee the integrity of ratings or else we will all end up with a race to the bottom. That is fundamentally my stand on the issue, that the development and registration on new CRAs must pass strong market tests. Exactly how we do that I don't know but the regulators must have this in the fore of their minds I would think.

#### 7. Is the CRA industry dominated by a few players?

Without a doubt. Fitch has come some way now but S&P and Moody's are the ivory towers and elite agencies.

#### 8. Would you like to see new CRAs in the market?

It is really hard to guess what impact new CRAs will have on finance. I can speculate but this question will be better answered in hindsight. I've already said that new CRAs should pass strong market tests. Part of this test will be their internal procedures, relationship management, internal capabilities and their fees. Also, investors will need some convincing because it is fundamentally their decision whether or not to welcome new CRAs. Conventionally CRAs and investors are detached from each other but the distance is receding with the information and regulatory pressure that has trailed the financial crisis added to recovery initiatives headed by the government.

#### 9. How would you select CRAs to rate your bonds?

We have a checklist that helps us decide the most equipped agency to do individual deals with and I will go through the checkboxes with you in a minute. The factor that weighs the highest is investor preference, whether they are actual investors or intended investors. Then we would consider technical sophistication in terms of the actual rating method, available time, available resources on our side and their side, the type of structure, any previous ratings



etc. to tick all the boxes. Our professional choice would not always match investors' choice and we don't precisely try to convince them because if we do then we could incur personal liability down the line if something goes wrong. However, within reason we can advise them on who we feel the best agency is to provide the individual rating. Normally our checklist will point us in the direction of S&P and Moody's most times.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

No, we would not do that...we just would not.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Yes we do. Security represents levels of risk which in turn define ratings. So we expect ratings to mirror the levels of risk in the security. The CRAs process this through the information we provide on issuer's behalf.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

Same as above.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

Going through the rating selection checklist and satisfying all vested interests means that multiple ratings are sometimes unavoidable. On occasion you could have investors selling out and buying in all at once and the ratings are a valuable piece of information at any given time. There is also something called the double confirmation effect where issuers work out that more ratings appeal and attract more investors regardless of the double rating fees paid. The danger of this is the possibility of split ratings.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

It is quite a standard process in that we get approached by the issuing institution to make an assessment of their structure. If it is a robust structure then we would make an application to the rating agency, we might complete a few forms or begin by contacting a marketer on their side. We then schedule meetings as necessary until the agency feel that they are in a position to assign an independent rating which they generally let us know before they go public.

**15. Tell me about the exit rating clause in rating contracts?**

It spells some of the joint liabilities of the issuer and the agency entering into fixed term rating contracts because ratings are designed to deliver ongoing surveillance. The clause becomes a problem when issues want out before the termination of the fixed term at which point the CRAs affirm their contractual commitment to assign an exit rating which could be positive or negative. In my experience the smaller issuers feel victimised by the clause but the larger issuers have the comfort of the double confirmation effect so their reputation stays intact.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

Ratings comprise nearly 100% of our relationship. Our other interactions are as a result of being in the same environment and being mutually affected by the happenings in this environment.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

Not relevant

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

No

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

No

**20. How would you describe your relationship with rating agencies?**

I would say valuable – it is a very valuable relationship. I do feel sometimes that the appetite for ratings is in overdrive but on the whole ratings occupy a very important place in the capital market.

**21. What is your impression on notching?**

To my knowledge there are two kinds of notching. The less contentious notching is for subordination on the basis of risk exposure where the rating agencies make rating distinctions for risk in the ratings that they assign. I am in support of this. The more contentious notching is inhibitive notching that punishes issuers for choosing a new rating agency; it is quite common place in financial services. I feel it is wrong to give mixed signals to the market by essentially publishing unsolicited ratings.

**22. What is your impression on tying?**

I have no idea.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

This was the case before 2008 but not after. The environment has changed almost entirely. Before 2008 everybody was out of control, the machine kept going and it seemed that the boom years could only get better. I think everyone is wiser now and CRAs also get heavily fined if they mess around with their due diligence. My personal observation is that smaller agencies are making a name for themselves in niche areas that are developing in the US. We are currently looking to underwrite some issuers in these areas so I cannot give you the full details.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

Financial products do not have life-cycles like other goods. What I mean is that we would not be able to quantify maturity because of the nature of financial innovation and corporate confidentiality that shrouds the trade. However, through regulation and investor requirements

we are seeing a rise in disclosure and that is what I hope will plateau so that investors have all the information they want. Financial products and innovation on the contrary does not go in quantifiable cycles.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

Again, this was particularly the case pre-2008 but we have come a long way in the right direction since then.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

It definitely used to be the case and frankly one of the reasons why this was so was because structured finance is an expert area that politicians get confused about. They needed experts on their side to explain things to them and so they created agencies like ESMA. Now the balance is just about right.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

I would say that notching undermines competition. I do not know much about tying.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

That is beside the point because they already are. The European commission is now up to CRA III so the intervention is not new anymore, it is extensive and rigorous. I am personally in support of the new disclosure rules regarding SFIs and what we need to report to ESMA on an ongoing basis. I think it is a step in the right direction. HSBC staff in the compliance department get involved in the calls for evidence at ESMA and so far I would say that European intervention is proving sustainable.

## Respondent M

### Transcript for Issuer

#### 1. Background and experience

I have worked at Standard Chartered since 2006 in a few countries and undertaken different roles. I started out as an associate in Singapore and then joined the wholesale team in Dubai. It was in 2008 that I joined the structured finance team in London still as an associate. I am now an associate director and I spend my time working between London and Dubai.

#### 2. Education

BSc. in Accounting and Finance

#### 3. Job Title

Associate Director, Structured Trade Finance & Financing Solutions

#### 4. Projects Involved In

Structured deals for downstream oil and gas, mining and metals. I also do cash flow modelling and due diligence on clients.

#### 5. Securities Dealt With

ABS and MBS

#### 6. Impression on Competition in CRA Industry

There is no competition, if there was competition then S&P will not be as powerful as they are. Last year S&P downgraded Standard Chartered for the first time in 20 years because according to them our emerging markets were unstable, so we slipped down one notch from AA- to A+. The irony is that our investors in the so called emerging markets were asking us for explanation, whether we knew something that they did not know because for them on the ground things were ok, business was steady. Some of my colleagues spent a long time in Hong Kong to paper cracks created by S&P. If there was competition, S&P's opinion will not cause so much panic in the system. It was not nice that the downgrade came at a time when Standard Chartered was taking some hard business decisions like liquidating the retail business in Asia to make the group even more profitable. At the same time we had just been fined \$400 million in the US for doing business with Iran. I would prefer that S&P downgraded us for these reasons, instead of making us look bad in the emerging markets that we flourish in.

#### 7. Is the CRA industry dominated by a few players?

I should have mentioned Moody's and Fitch, they are not as annoying as Standard and Poor's. Fitch gave us a negative outlook in 2014 but they were not so arrogant about it. I know of new CRAs in Europe but many of them provide only a narrow range of rating services which makes them limited to contract. We need more expert agencies in structured finance because that is where market dominance can be offset. I have discussed the services of some new agencies in Europe and they are only as good as an audit firm. They need a lot more sophistication and competence.

**8. Would you like to see new CRAs in the market?**

For sure, I think that just like in the media you get a clearer picture with more agencies reporting the news. We need a more balanced story particularly for corporate ratings that rely on secondary evidence. Standard Chartered pays Moody's for corporate ratings. But just like I said in the previous question, I would prefer new CRAs with skills in structured finance and expertise in the niche areas of structured finance. We have enough generalist CRAs and I do not know how they find business to survive, or if they have any business at all. I once tried to make contact with an agency that was supposed to be the best in Bulgaria but it was a waste of time even though they were registered by ESMA.

**9. How would you select CRAs to rate your bonds?**

It varies. We consider who we are offering the investment to and the ratings they want to see. As sponsors we are the go between so we place investors on a waiting list for the next opportunity. So specific CRAs and their know-how will fit the bill. It is not always S&P, Moody's or Fitch, if you are providing a solution in Kenya, Tanzania, China or Japan then you really have to think about the suitability of going with one over the other, and also whether they are able to do the job within the needed time. Sometimes we have convinced the stakeholders and checked out other agencies and they have done a marvellous job. I know that some banks go from one agency to the other until they can get the best rating. We do not do that. If we are not sure the deal will fly with any agency then we are exposing ourselves to corporate risks which in the end will not be worth it for our reputation.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

No, that would be a dubious demand don't you think. Issuers create pools because the assets are not individually lucrative by themselves. Together all the securities can better withstand financial stress so it will be difficult to assess their resistance to stress individually. Actually, rating selected bonds in isolation defeats the purpose of pooling, which is to create reliable assets by packaging their risks together.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Secured bonds are safer purchases because holders can claim an asset if at all the issuer defaults. Secured bonds are good for sleeping better at night but the payback is limited. Unsecured bonds are more popular because of this reason, that the payback is higher and they have good ratings, as high as secured bonds in some cases. This does not deter investors who are taking a risk anyway whether for secured or unsecured bonds. What the CRAs are interested in is the prospect of genuine payback.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

This is a repeated question.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

I have sponsored a few of these when we tried to attract new investors for pools with outstanding securities to be purchased. Or sometimes, we may want to review existing ratings with another agency. It doesn't matter if the ratings lead and lag by a notch or two, if it is wider than that they will be interested in an explanation that might also help our due diligence. I am very interested in split ratings; you learn something from them and can see how the different agencies interpret information. Sometimes they turn out to be unreasonably cautious which drives me nuts, but they are never too bullish.

**15. Tell me about the exit rating clause in rating contracts?**

S&P are very hot on this clause and I understand the logic behind it but not the motive. At some point you feel that you are being forced to pay for ratings that are not required by investors. But, if you choose not to pay they will go ahead to announce a rating from publicly available information which is never representative. So we are really caught in a dilemma when the clause is present. The safest thing to do is to negotiate a generous rating fee and hopefully obtain a factual rating.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

I would sit down with the issuer and get the numbers right. It can take any length of time because you want to go to the CRAs 100% prepared. Whilst I am working with the issuer we agree on the agency that we would like to publish the ratings and then make an application to them. Once they respond and if they are willing we sign a contract, have meetings, one or two, or even three. I have had up to ten meetings on a deal because it was new ground that we were breaking and there was no margin for error. It is basically checking and rechecking because all these comprise the information we make available to the bondholders to surrender their savings, so you are trying to answer all questions before they have to ask. And then hopefully we get the desired rating at the end or something close to it or even better. The issuers usually have a dream rating, and we would also have one if there are investors on the waiting list that we want to satisfy. Issuers can have unrealistic dream ratings so it is my job to bring them down to earth as their sponsor, and tell them that their product is not a risk-free as they think. It is better if they hear it from me first because when we meet the agency we can have a less heated conversation with some of the pressure already doused.

**15. Tell me about the exit rating clause in rating contracts?**

Previously the exit rating clause was only used in corporate rating contracts.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

Only ratings and ratings review. The contracts may have a renewable term and you will need to purchase a withdrawal rating to break contract within the term with some of the agencies. We need rating reviews because investors get paid semi-annually so you want to reassure them that business is still going strong over the life span of the unit which is easily 9 - 11 years.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

Rating reviews are mutually generated.

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

Not in my structured finance team.

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

Rarely so, because I have to be careful what information I disclose during rating meetings.

Most issuers like to keep things tight until they are ready to issue. I will not like to compromise their prospects but the agencies can find this sort of thing out when they do their valuation, they are shrewd people.

**20. How would you describe your relationship with rating agencies?**

Without going into details, it could get a bit heated with arguments when an analyst proves to be a hardliner on an issue that should not be. And then I will be working against time, between issuers and bondholders and it just gets a bit tiring until there is some sort of concession. You have to be controlled in these situations and stay constructive and focused on the deal and not the analyst's personality. I do not need to like him or her, but when the issue is conceptual and has nothing to do with the deal's fundamentals you can lose your mind and even swear a few strong words. With time I have got better with handling these things.

**21. What is your impression on notching?**

Notching is different ratings for different financial stresses for bonds within a pool. It will be quite hard to evidence notching in structured finance but in corporate ratings. We just spoke about S&P downgrading us, well...that could be because we are somewhat loyal to Moody's as a group but you will have to ask S&P of their intentions.

**22. What is your impression on tying?**

As you have described it, Standard Chartered may be tied to Moody's but that is because it makes business sense. You would not hire a new auditor every year to verify your accounts, continuous dealing makes sense in many ways.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

During the financial crisis we were in a fortunate position because most of our income in wholesale came from interest on loans and service charges in the emerging markets and places like India where we have a vast presence. So the damage done to us was not as great as the damage at other banks. I was fairly new here when the crash unfolded and it was weird that the buildings next door were getting empty but we were still working long hours. I was anxious like everybody but our RMBS ratings in the emerging markets did not dip so badly, obviously there was some infection but it was much reduced from what happened with other banks and their issuers in North America. I think banks with strong links to the US housing market were worse hit. I have seen the profile of some home owners with big mortgages and I

really cannot understand how they stacked it up. So our issuers in the emerging markets slowed down a little bit as you can expect, everybody operated in low gear for the next 2 – 3 years but the need for ratings is still real and that is why issuers pay for it anyway.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

For me, any market is efficient if prices represent existing information at the point in time. The market has become more transparent over the last few years, and I think that is a sign of maturity and efficiency. Prices in the developed financial markets are all digital and shared in real-time, and we have new electronic boards that get better and better in displaying the prices and decoding information. The problem for me is in the emerging markets where for many reasons the handling of information is not as efficient in spite of the noticeable improvements. I have seen the market in Kenya and Tanzania progress so much because their governments have suddenly realised the importance of this for stakeholders so the signs are good.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

I totally disagree. I and my colleagues in Standard Chartered at least work our socks off to help our clients select the best issuers, and we also make sure we sponsor only the best issuers and the only way we do this is by showing real facts and materials that mirror repayment to the highest possible degree. We invest a lot in modelling techniques and train even colleagues who work outside the structured finance team on these models to help them in their conversations with public and private sector representatives. So bondholders investing through us have enough incentives and we help them trade up and down when they think it is right for them.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

I think in the past they did, but there are now reforms with the public outcry after the market crashed. Now governments have invested in more regulators and more regulation. ESMA look like they have been around for ages but they are not even 5 years old yet. Some of the regulations are painful to comply with but they are orders and we have to protect the wider public to make sure that the projects and securitisations do not implode. To be honest, regulation only becomes too much when it makes it difficult for investors to participate in the market.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

Not necessarily. Nobody likes to be bullied and although it might be painful in the short term if you are notched, you have all the time later to go with another agency. Tying is business as usual; as they say if it is not broken do not fix it.



**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

I support the motion but I think article 8 does not go far enough. It only encourages issuers to consider a smaller rating agency in addition to the compulsory two. That is not firm enough to change the convention and rating fees are already high for issuers to pay for three. A ruling for issuers to appoint one big and one small agency will be more effective to increase competition; this is what I would recommend to ESMA.

## Respondent N

### Transcript for Issuer

**1. Background and experience**

Formerly Investment assistant, now portfolio manager at Henderson Institutional under Henderson Global Investors.

**2. Education**

BSc. Actuarial Science, London School of Economics

**3. Job Title**

Portfolio Manager, Government Bonds Team

**4. Projects Involved In**

Government Bonds

**5. Securities Dealt With**

UK Gilts

**6. Impression on Competition in CRA Industry**

There is no clear competition among CRAs for fixed income securities, but in small sectors of financial services like insurance where DBRS have a strong position. Apart from that, in the main, Standard and Poor's, Fitch and Moody's control the market.

**7. Is the CRA industry dominated by a few players?**

Yes, I have just told you that.

**8. Would you like to see new CRAs in the market?**

The European Union certainly would like to see more CRAs in the market if you believe the intention of emerging policies. Personally I think we have enough of them already.

**9. How would you select CRAs to rate your bonds?**

We work in asset management and are not issuers ourselves. What we do is to make the best investment decisions for our clients. Most of our assets under management are rated by Moody's and S&P.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

We would be very doubtful of an investment with split ratings

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Yes, and we would expect a qualitative explanation of the differences to inform our own judgment at Henderson Institutional.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

Conditions could make it possible for a subordinate tranche to rate as high as a senior tranche, the reason behind the ratings is the information we really want. For most investors any product with investment grade ratings will serve.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

I have experienced counterpart ratings many times but I would not know whether they were solicited or not. I like counterpart ratings because they offer more information and analysis that you would get from one CRA. To advise investors you have got to see yourself as an investor, so more information always helps especially for the sake of comparison.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

I do not get involved in the rating process

**15. Tell me about the exit rating clause in rating contracts?**

I do not know about this clause

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

Undisclosed

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

Undisclosed

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

Undisclosed

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

Undisclosed

**20. How would you describe your relationship with rating agencies?**

Undisclosed

**21. What is your impression on notching?**

It is a touchy issue; I think that notching is necessary if it is done to signify mixed liquidity within a bond structure. On the other hand, colloquially, notching is seen as a way of extorting business from issuers by CRAs; this is unnecessary but it happens in many hidden ways and I do not think that any of the leading CRAs is any more saintly than the others.

**22. What is your impression on tying?**

Tying is a necessity in financial services, especially with securities. You cannot open your books to several third parties at the same time, so I think both issuers and the CRAs benefit from continuous dealing. The issuers can rest assured that the CRAs know their balance sheet and the CRAs are just happy to reap the benefits of repeat business. We do not have legislation against tying in Europe as far as I know, and it is only specific to Banks in the US. So even if we think tying is not right, it is purely our moral position and not a legal position.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

I disagree, poor rating performance leads to a reduction in rating requests. I know of several dead and buried SPVs. Why did they die? Poor management led to default and the market

rejected them after they re-securitised. As a fund manager you will know the history of the SPV even when it is spun-off, this is what your clients pay you for.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

The financial market is generally a mature place but it does the head of many in. I know many people who loathe financial conversations of any sort but when you are on the floor of the London Stock Exchange for example, you will immediately understand the efficiency of the market, mostly aided by technology and the high frequency trade that is now possible. You see how bid and ask prices are matched and how the order books are managed. It is not called an 'organised market' for nothing. It is a disciplined market for me, especially with government bonds which are more or less straightforward and guaranteed investments. All government bonds are managed by the Debt Management Office (DMO), so that is another layer of discipline and maturity.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

Direct participants will have all the required information, indirect participants maybe not so much because they are not keen or deeply invested. Most of the population only participate in the market by proxy, especially through pension and mutual funds, so you wouldn't expect them to be keen on processing so much information. Direct participants however work with fund professionals like myself, there are over 900 employees at Henderson Institutional and we are all customer facing to provide household and corporate investors with all the information we possibly can so they can reward good issuers and if you like punish bad issuers. We can only attract investors by providing quality information, so our £90bn assets under management reflect that.

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

I believe in deregulation. All the things we have talked about like market discipline, efficiency and maturity can only happen when the government allows market forces to lead the way. I think the government should only step in to manage bad corporate governance.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

Only supposedly, it could distort the natural pattern of things and the market is like a pack of cards, an arbitrage or bad practice in one area can make the whole sector collapse. As I said in the last question, it is bad internal governance that poses the biggest risk to financial institutions. Also, regulators must nip all artificial arbitrages in the bud.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

Not for me, I already said deregulation is more sustainable. It may be a slow journey but London is a financial powerhouse because of liberal policies. I would only like more CRAs with headquarters in London.

## Respondent O

### Transcript for Issuers

**1. Background and experience**

Financial Controller 2013 – 2015, Standard Chartered

Programme Director Group Treasury 2011 – 2013, Standard Chartered

Managing Director Structured Solutions 2008 – 2013, Standard Chartered

**2. Education**

BA Commerce, FCA and ACIB

**3. Job Title**

President, Karson Management

**4. Projects Involved In**

Capital and Liquidity Management

**5. Securities Dealt With**

CDOs, CBOs, CLOs and CMOs.

**6. Impression on Competition in CRA Industry**

It is a stable oligopoly between Standard and Poor's, Fitch and Moody's. They are hardwired into the system.

**7. Is the CRA industry dominated by a few players?**

Yes, by these 3 certainly. Serious investors do not look past them.

**8. Would you like to see new CRAs in the market?**

Yes, if they have sound practices.

**9. How would you select CRAs to rate your bonds?**

We make a short list of the agencies based on competence, rating fees and client preference.

**10. Would you request a rating agency to rate only selected bonds within a pool of securities, and would they comply with that request?**

When we make such requests we tell them why. We may only be offering some of the bonds to investors at the particular time and not all of them. We also do not want to pay for ratings on bonds not to be issued. If they are convinced they, the CRAs comply, but I know for sure that they analyse the whole pool in the background, we do not mind as long as we do not get charged for the extra work.

**11. Do you receive different ratings for secured and unsecured bonds within a pool of securities?**

Surely, the safety level to the investor varies for secure and unsecured bonds, so the ratings indicate that.

**12. Do you receive similar ratings for senior and subordinate tranches within the same pool of securities?**

No. Again, investors will expect AAA or AA ratings for senior tranches and any of the investments grades for junior tranches. We may not even bother rating the most junior tranches, this is why we call them the first loss piece, but they do pay better interest because of the greater risk exposure.

**13. When presenting a pool of securities for rating, do you present some securities whose underlying assets have been rated by counterpart rating agencies?**

It depends on what the issuer presents to us, if they present counterpart ratings we will present them for re-rating. We always do in such cases.

**14. Now let us talk about your experience in the rating process. How does the rating process work?**

We establish first contact to start the process with the agencies. We would then attend meetings with them to give numbers and explain the financing we are looking to develop for the issuing client. They come up with an independent rating and let us know. Over time I could predict what the rating will be roughly, so there was no ill feeling but once in a while you get a surprise so it is a matter of querying the analysts until you reach a fair rating. Querying them does not always change the rating if the matter cannot be resolved, the issuers will have to take it on the chin.

**15. Tell me about the exit rating clause in rating contracts?**

The clause is very controversial and you do not see it in all contracts. The rating agencies decide when and where it is necessary. Many people believe that it is there to serve the commercial interests of rating agencies because sometimes institutions have a valid reason to withdraw ratings but face the penalty of exit ratings which can turn investors against them. I would agree with this argument because the rating agencies say that their ratings are a long-term view of creditworthiness, but exit ratings are point in time ratings which often cause investors to react with panic to the disadvantage of issuers.

**16. Besides ratings, what other dealings (services) do you have (receive from) with rating agencies?**

At Standard Chartered we received only ratings.

**17. Do you initiate (demand) these dealings (services) or are they initiated (offered to you) by rating agencies?**

No comment

**18. Do you receive additional services like consultancy and risk assessments from rating agencies?**

None

**19. Are the rating agencies you deal with aware of the bonds you intend to sell in the future? Do you disclose this information to them?**

No. This would be a conflict of interest.

**20. How would you describe your relationship with rating agencies?**

They enable us to gain credibility with investors, I see them as essential actors so we have a good working relationship. My only issue with analysts is their level of experience, I prefer old-timers but it could be anybody with all the turnover that they have.

**21. What is your impression on notching?**

There are different three kinds of notching in my experience. You can have different ratings for the corporation and for the security, this is one kind of nothing. You can also have different ratings for different levels of exposure within a pool. But I do not like the last one, when you

get an unsolicited rating that is inferior to your solicited rating. There should be effective legislation against that.

**22. What is your impression on tying?**

This is something I have not heard of.

**23. Do you think the rating industry is different, in that poor rating performance does not lead to a reduction in rating requests?**

Once more, serious investors have the ability to analyse why ratings fail, the same way banks do. What you consider are the unanticipated circumstances around the security that exceed the reach of rating agencies. We have seen externalities having negative effect on structured solutions, and not all these externalities can be remotely anticipated. I still feel that the rating agencies try to do an exhaustive job despite the challenge.

**24. Would you consider structured finance a mature sector? Do you think that there will be market discipline when the market achieves maturity?**

We are in the nascent stages and growing even though things slowed down recently.

Structured finance is surviving and the number of innovative products is also increasing, you cannot find a person who is an all-round expert. As for market discipline, there is economic efficiency in boom time and vice-versa. I don't think the two are linked, not necessarily.

**25. Do you agree that market participants in structured finance do not have sufficient information or sufficient incentives to discipline bond issuers?**

They have enough information. If you are an investor you will be provided with all the facts and figures you need, how else would you put your money in?

**26. Do you think that regulators depend too much on market participants to harness market discipline in structured finance?**

Yes, but structured finance is not unique. A lot of markets are unregulated or under-regulated, but I will support reduced reliance on the market because the government has to protect the welfare of people. Structured finance affect our pensions and mortgages so it should be a priority for the government to control.

**27. Supposing notching and tying were real practices, would these limit free choice and constitute a barrier to new rating agencies trying to enter the industry?**

I think notching is a bad thing. It causes confusion and gives us more work for the benefit of only the rating agencies. I cannot say if it limits free choice, but it is a selfish practice.

**28. Is it desirable for the state to intervene in increasing competition in the rating industry?**

If intervention has any welfare benefits I will support the state to intervene. Welfare benefits should be about people's life savings, pensions and homes.